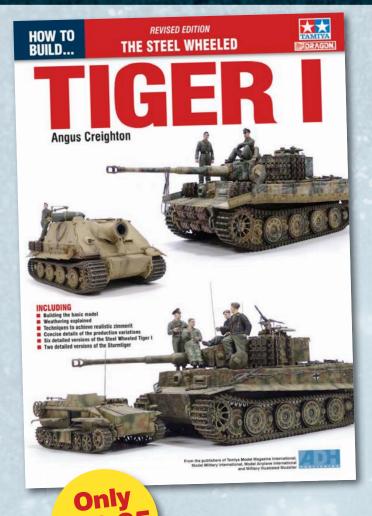


NEW in the 'HOW TO BUILD...' series





NEW How to Build The Steel Wheeled Tiger I

A New and revised edition of the ultimate guide to building the Tiger I Steel Wheeled version by Angus Creighton.

The new revised edition includes:

- Early-batch Sturmtiger, using Tamiya's 1:35 kit with factory zimmerit, ModelKasten battle-tracks
- Late-batch Sturmtiger, using Tamiya's 1:35 kit, Dragon late pattern road wheels, extra frontal armour, no zimmerit, ModelKasten battle-tracks
- Dragon's 1:35 Tiger I (SPzAbt 510 1944-45), ModelKasten transport tracks
- and more...

NOW SHIPPING

ALSO AVAILABLE Visit adhbooks.com for details





























PLACE YOUR ORDER NOW ON TEL: 01525 222573 FAX: 01525 222574

The Steel Wheeled Tiger I book **P\$P:** UK; £2.00 Europe; £4.00 World-Wide airmail; £6.00 Cheques payable to: ADH Publishing Ltd. **HOW TO BUILD... STEEL TIGER** Please debit my credit/debit card for £ Visa ☐ Mastercard ☐ Maestro ☐ other...... Name Start date Security Number (last 3 digits on signature strip) Sianature.. Issue No (if applicable).. Post/zip code Please mail this form to; ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX, United Kingdom Tel; +44(0)1525 222573 Fax; +44(0)1525 222574 Online; www.adhbooks.com (Photocopies of this form are acceptable)



Contents - Issue 124 August 2016



REGULARS

What's new in the world of military modelling

p 58 FIGURES

News on the latest 1:35 and 1:32 scale figures

p 59 LARGE SCALE

Italeri's 1:9 scale Triumph 3HW

p 60 1:48 SCALE

Luke Pitt explores 1:48 scale military models, figures and accessories

p 66 LAST POST

Military Briefs 5: Australian Leopard AS1

FEATURES

p 6 THINK TANK

M10 Tank Destroyer by Bruce Culver

Zvezda 1:35 King Tiger Porsche

p 16 HARD HITTING CONVERTIBLE Part One

Tamiya's new 1:35 M10 Tank Destroyer by Brett Green

p 26 WEATHERED WHIPPET

Meng 1:35 Mk.A Whippet British Medium Tank by Kamil Feliks Sztarbala

p 40 KOREAN WAR FAST FOOD

MiniArt's 1:35 BA-64 by José Brito

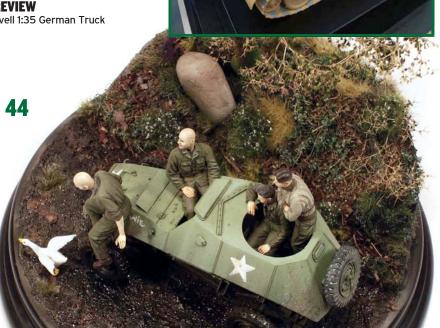
p 50 SHOW REPORT

Shizuoka Hobby Show 2016

p 56 PREVIEW

Asuka 1:35 M4 Sherman Composite

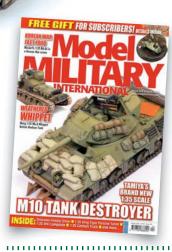
Revell 1:35 German Truck



48



26



©ADH Publishing Ltd 2016

Tel: (UK) 01525 222573 Fax: (UK) 01525 222574

Email: enquiries@modelmilitary.com

Address: ADH Publishing,

Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX, UK

Model Military International is published monthly by ADH Publishing. Reproduction in part or whole of any text, photograph or illustration without written permission from the publisher is strictly prohibited. While due care is taken to ensure the contents of Model Military International is accurate, the publishers and printers cannot accept liability for errors or omissions. ISSN 1749-8864

MMI Newsdesk, ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX, UK Tel:01525 222573 Fax:01525 222574 Email:editor@modelmilitary.com

Canadian Leopard 2 Reference Images from Armour Piercing Photography

rmour Piercing Photography, operated by Jason Bobrowich a former Leopard tank commander, has released three Canadian Leopard 2 based digital reference image DVDs.

Canadian Leopard 2A4M CAN, Main Battle Tank: This two DVD set features over 1100 high resolution images of the Canadian Leopard 2A4M CAN showing extensive details of the hull and turret as well as the Leopards on parade and undergoing maintenance. The Leopards are currently undergoing upgrades to further enhance their fighting capabilities.

Canadian Leopard 2A4 CAN, Main Battle Tank: This DVD features over 550 high resolution images of the Canadian Leopard 2A4M CAN showing extensive details of the hull and turret as well as the Leopards on parade and undergoing maintenance. These ex-Dutch Leopards have been modified to Canadian specifications in order to provide a modern tank for enhancing crew skills.

Canadian Leopard 2 ARV CAN, Armoured Recovery Vehicle: This DVD features over 350 high resolution images of the Canadian Leopard 2 ARV CAN showing extensive external and internal details. The Leopard 2 ARV CAN is the newest Armoured Recovery Vehicle in the Canadian Army entering service in 2014 in order to replace the aging Taurus ARV. The Leopard 2 ARV CAN has incorporated many lessons learned during combat in Afghanistan in order enhance crew safety and increase the efficiency of recovery tasks.

For more information and for ordering please see the Armour Piercing Photography Facebook page:

https://www.facebook.com/groups/236742973363249/



Mirror models new releases

that should be available by the time you read this.

The first is a 1:35 scale CMP F30A LRDG Truck with 37mm Bofors Anti-Tank Gun. Considering the interest in all things I RDG, the range of colourful desert finishes and the availability of some really lovely resin 1:35 scale LRDG figures, this should be a very popular choice!

Next up is a 1:35 scale CMP C60S Holmes Breakdown Wrecker. This represents the 3 ton 4x4 chassis with Cab 13. Wreckers are very versatile in diorama scenes. depicting vehicle recovery or even transporting enemy equipment. Another interesting choice.

The final variation on the theme is the CMP C60L Water Truck, another versatile subject with some interesting diorama possibilities for desert. Mediterranean, European or Far Eastern theatres.

Thanks to Mirror Models for the information and images www.mirror-models.com









Based on the chassis of the M4 Sherman tank and fitted with a 3-inch M7 gun, the M10 was numerically the most important U.S. tank destroyer of WWII.

The M10 was built in response to the stunning successes of the German armoured Blitzkrieg at the outset of the war in Europe. Fitted with a turret, unlike most self-propelled artillery of the era, the vehicle was more heavily gunned but lightly armoured than a tank. M10 crews were expected to make the most of their vehicle's speed and agility.

The M10 received its baptism of fire in Tunisia in 1943 where it demonstrated its ability to destroy most German Panzers then in service. Illustrated with more than 135 vintage photographs and detailed line drawings.

This 80 page book by noted researcher David Doyle in Squadron Signal's "In Action" series is perfectly timed for Tamiya's all-new 1:35

Available right now from ADH Books www.adhbooks.com



Introducing the

Heat & Pour Mould Making Materials

Shesto Introduces

Excellent material for those wanting to learn and become involved in sculptings, modelling and mould making without having to worry about mistakes or wasting material.

Composi-Mold makes your ideas come to life







Easily cast items in resin









Non toxic, microwavable & eco friendly



10 oz/283g

Use as a mould, reheat and start again



Reusable over 35 times

Mould Making Materials:



Clear Casting Plastic Produce wonderful castings from your Composi-Mold

> Sizes: 8 fl oz & 16 fl oz (236ml & 473ml)



Mould Release Oil Easily remove original and casted parts from your mould

Size: 4 fl oz (118ml)



Bubble Buster Spray over before casting to reduce the surface tension

Sizes: 6 fl oz & 16 fl oz (177ml & 473ml)

For details of your nearest stockist, call or e-mail today! (Trade Enquiries Welcome)













M10 GUN MOTOR CARRIAGE

Bruce Culver describes the rationale of the U.S. Tank Destroyer concept, and the development and deployment of the M10 Gun Motor Carriage.

he British development
of the armoured tank in
World War I presented the
Germans with a dilemma
- the need to adopt a means of
stopping the new weapons, which
on occasion had been able to
overcome defensive positions
British infantry had not. The
subsequent search for anti-tank
weapons has continued down to
the present day.

The first response had been the development of armour-piercing bullets – a "reversed bullet" with increased velocity and the "K" bullet, an armour-piercing round that was effective but often damaged the rifles used to fire it. The introduction of the Mk IV tank in 1917 made the "K" bullet ineffective, as it had more armour than the bullet could penetrate.

The next approach was a new anti-tank rifle, designated the Tank abwehr Gewehr M1918, often called the T-Gewehr. It was based on an enlarged Mauser infantry rifle action and fired a 13.2mm bullet that could penetrate the Mk IV tank. Although able to penetrate 20mm of armour at 100

meters (15mm at 300 meters), the T-Gewehr was a very heavy and cumbersome weapon, often jamming or misfiring due to the high recoil forces. The recoil was also very hard on the soldiers who fired the weapon, as no padding or recoil reduction system was fitted, and dislocated shoulders and broken collarbones were not uncommon. The T-Gewehr was the only anti-tank rifle used in WWI.

In 1918, the Germans finally realised the strategic danger posed by the better Allied tanks being deployed against

them. They introduced the Tank abwehr Kanone, a small 3.7cm anti-tank gun quickly adapted by Rheinmetall from existing components. The barrel was mounted rigidly on the lightweight carriage, and the weapon proved to be portable, stable and accurate in firing. The .46kg (1 pound) projectile could pierce 15mm of armour at 500 meters. About 600 were issued to German troops before the Armistice. In addition, existing 77mm field guns were issued armour-piercing ammunition in 1918. ▶



One early development in the new tank destroyer concept was the stop-gap design of the M6 Gun Motor Carriage, a 37mm M5 anti-tank gun mounted on a Đ ton Dodge weapons carrier. This example was seen in Tunisia in early 1943 – note the .30 LMG mount.



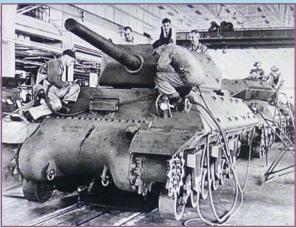
The other initial type adopted by the Tank Destroyer Command was the M3 Gun Motor Carriage, a marriage of the M3 half-track and the 75mm M1897 anti-tank gun. The crew was poorly protected and losses were high in Tunisia, where this example was seen.



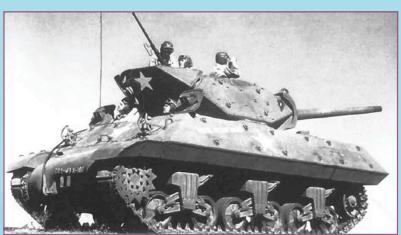
The T35 seen here was the first prototype of the new self-propelled design mounting the 3 in. (76mm) T12 gun. The hull and chassis were based on the M4A2 diesel powered medium tank. This was the original round turret, which proved to be very cramped.



The Tank Destroyer Board asked for a lower hull, and this new design was the result, having one of the best ballistic shapes of WW2. However, in keeping with the board's desire for maximum speed in manoeuvre, the armour was lightened considerably.



The new MIO Gun Motor Carriage entered production at the Fisher Tank Arsenal in September 1942. Production lasted through 1943 and Fisher built 4993 MIOs. The initial examples did not have turret counterweights and grousers were placed on the turret rear.



Training for new tank destroyer crews took place at Camp Hood in Texas where this example was photographed. This MIO had the standard type of turret counterweights to balance the weight of the gun and make the turret easier to rotate.



Think Tank - M10 Gun Motor Carriage



This MIO came a cropper while being loaded into a landing craft. It is a very early production vehicle with the early improvised turret counterweights seen in Africa. This view allows a good look at the engine deck, wading trunks and the early turret details.



This MIO of 'A' Co, 701st TD Bttn, was emplaced near Mignano, Italy in December 1943, providing fire support for local troops. Many tank destroyers were used in the same way as medium tanks, firing mostly HE ammunition to support the infantry.



In this atmospheric shot, an MIO of 'B' Co, 803rd TD Bttn, fired on German forces near St. Lo during July 1944. This was a later production version with the enlarged turret and revised counterweights adopted in 1943. The wading trunks often staved on the vehicles.



Though the Allies had much less need to adopt foliage for camouflage, this MIO of the 703rd TD Bttn in Normandy in 1944 looks almost German. In the hedgerow country of Normandy, foliage like this helped conceal vehicles in the thick vegetation.

■ BETWEEN-THE-WARS MALAISE

The end of WWI and the subsequent draw-down of most military budgets and activities over the next 10-15 years meant that little research or development of effective anti-tank weapons occurred in most armies during the 1920s and early 1930s. Most tanks of the period were reworked WWI

designs or designed as infantry support tanks meant to accompany infantry at a walking pace, and emplaced anti-tank field guns were seen as the best defence against opposing armoured forces.

In addition, most of the military thinking in the 1920s and early 1930s was defensive in nature and often allied with the use



This MIO was photographed in the Anzio beachhead in February 1944. Burying the vehicle in straw concealed the shape well and was fairly quick to do, but firing the main gun often blew much of the camouflage away – the 3" gun had a strong muzzle blast.

of well-defended borders using natural obstacles like rivers and mountains, augmented by suitable fortifications. The ultimate expression of this was the French Maginot Line, an extensive line of fortified positions connected by a system of tunnels that allowed safe replenishment of the gun positions by a railway system underground.

It was the most extensive fortified border in Europe, but had a serious defect: it did not extend all the way to the English Channel. In 1940, the Germans again attacked through Belgium and the Low Countries, and simply bypassed the Maginot Line instead of trying to break through it.



Another MIO, this one from 'A' Co, 702nd TD Bttn, also adopted heavy foliage. At this time, the 702nd was attached to 2nd Armored Division, providing additional anti-tank support, as the armored division's Sherman tanks in Normandy had only 75mm guns.



This MIO of the 700th TD Bttn was photographed in St. Fromond, France in July 1944. The open top and thinner armor of the MIO made it much more vulnerable to ambush attacks by enem infantry and hidden anti-tank guns in towns and built-up areas.



French forces were equipped with mostly US weapons, like this MIO GMC of the 2nd French Armored Division. It was seen near Halloville, France in November 1944. Sandbags were a very common addition of 'soft' armor in late 1944



This MIO of the 601st TD Bttn at Anzio in February 1944 showed the usual extensive external stowage of crew equipment - there was little room for this inside the vehicle. It also had a comi modification, moving the .50 HMG from the turret rear to the front.

REASSESSING ANTI-TANK WEAPONS

The rapid advance of the German army in the 1939 and 1940 campaigns led to a reassessment of the US Army's needs to protect against tank attacks, particularly the rapid and coordinated assaults seen in Poland and France. Most anti-tank weapons in use at this time were relatively small infantry anti-tank guns, typically from 25mm to 40mm in bore diameter and capable of destroying most of the tanks available in the 1930s. During the Polish campaign, Polish anti-tank guns had taken a serious toll of the German light tanks and even the PzKpfw III and PzKpfw IV medium tanks carried fairly light armor, easily defeated by the 25mm and 37mm guns they encountered.

The Germans developed new armour doctrines cooperating with the Russians. Both armies benefitted from the experience, though in Russia, Stalin's purge of the officer corps in 1937-38 eliminated many of the more progressive officers which led indirectly to the huge casualties in WWII. Infantry and armoured units would be issued anti-tank guns in the mobile divisions to have an organic anti-tank capability.

Tank doctrine of the period was divided between the infantry support approach and the cavalry approach, the former involving

tanks serving as support artillery for advancing troops and the latter serving in a fast-moving cavalry role of scouting and exploitation. In several armies this resulted in different types of tanks - heavier slow infantry support tanks, often with multiple turrets, and lighter, less heavily armoured cavalry (cruiser) tanks suitable for rapid movement but having high-velocity guns for use against tanks.

In the United States, the military had been starved during the post-WWI period and then the Great Depression had crippled budgets even more. The experience in Europe had shown however that smaller concealed anti-tank guns could be effective in stopping tank assaults. The small-calibre antitank guns of the 1930s (usually 25mm to 40mm bore) were light and easy to manoeuvre and emplace, and low enough that camouflage was a simple affair. As tanks became heavier with thicker armour, anti-tank guns also grew and fired larger projectiles. Eventually, the guns became too large and heavy for the infantry to use them quickly or effectively, and many lighter guns were used as long as possible.

DEVELOPMENT OF THE TANK DESTROYER

This new situation led to the development of self-propelled antitank guns, or tank destroyers. Tank destroyers typically were built on half-track vehicle or tank chassis, and carried a larger gun than contemporary tanks. They also typically carried much less armour than tanks and thus left the crews relatively unprotected. Many tank destroyers were hastily assembled from obsolete tank chassis and guns adapted to fit, and even those designed for the purpose sacrificed armour for speed and the larger weapons carried.

In the United States, the doctrine of the tank destroyer was supported by a number of officers who saw the concept as a way to fight the new German tank forces. The standard infantry anti-tank gun was the 37mm M3, developed from the German 3.7cm PaK 36. It could be towed by a jeep and this kept it in use for the early part of the war. It was effective against light armoured vehicles, but by the time it was adopted in 1940, it was not effective against the newest tanks, and a better gun was needed.

The driving force behind the US doctrine of the tank destroyer was Lt. Gen. Leslev J. McNair, an artillery officer who had served in action against Pancho Villa on the Mexican border, WWI, and a number of staff and teaching positions during the 1920s and 30s. From 1940, Gen. McNair was first Chief of Staff of Army General Headquarters and then commander of Army Ground Forces, responsible for the training and equipping of all ground units sent to combat areas. He helped build an army of 8 million from a cadre of about 100,000 men before 1940, and this was one of his greater accomplishments.

Gen. McNair was a traditionalist and his views on doctrine and equipment carried considerable weight. He felt that the airplane and tank had not permanently changed the way wars would be fought, and that the combination of infantry and artillery was till the most important factor on the battlefield. While maintaining that an army properly led could prevail if it was a balanced force, he had become convinced that emplaced mobile artillery could defeat tanks when used properly, and war games in Texas and Louisiana seemed to confirm this, under the rules used in the games. In addition, artillery in the form of anti-tank guns was far cheaper than producing new tanks.

THE ROLE OF THE TANK DESTROYER

In Gen. McNair's view, the role of the tanks was to exploit the gains of the infantry, push through the breached enemy lines and attack rear echelons and communications and supply areas. Thus, he felt the use of tanks to fight enemy tanks was a waste of that resource,

Think Tank - M10 Gun Motor Carriage



The MIO was also used in the Pacific campaign - these MIOs of the 767th Tank Bttn were photographed on Kwajalein atoll in 1944. The 3" gun was effective against all Japanese armour encountered during the war and also had an excellent HE shell for fire support.



This late production MIO was seen at Ormoc Bay in Leyte during the Philippines car larger final turret and counterweights and the lack of mounting bosses for appliqué armour, which had been dropped from consideration earlier.



The Allies invaded southern France in August 1944 in 'Operation Husky'. This MIO was from 'C' Co, 601st TD Bttn, and sported much extra stowage with custom racks to hold it. An extra .30 Browning LMG was mounted up front for better forward protection.



MIOs and other tank destroyers were often used as tanks by infantry units to which they were attached, providing fire support and transporting infantry going into the line. This MIO of 80Ist TD Bttn near Mabompre, Belgiu carried troops from the 22nd Inf Regt.

and the tank destroyer was the weapon to deal with enemy armour. It should be noted that tank destrovers were considered a reserve force, and while they were to manoeuvre aggressively to achieve surprise in the ambush. they were not supposed to attack or engage enemy tanks in the open - they were a defensive force intended to blunt and stop an enemy armoured thrust or counter-attack, firing from ambush positions.

INITIAL U.S. TANK DESTROYER DESIGNS

Though McNair's preference was for towed anti-tank artillery to be the core of the tank destroyer force, self-propelled weapons would be necessary, and plans soon appeared to acquire mobile tank destroyers. In 1942, there were few resources available as the entire US military was expanding at a rapid rate. The two initial tank destroyer designs were expedient systems. The first design was based on the new Fargo-Dodge T214 + ton weapons carrier, fitted with an M3 37mm gun in the rear bed with

a built-up 6.35mm (+ in) armour shield and designated the WC55. The crew protection was minimal and the weapon no longer effective against the tanks it would meet in action. At 460 meters (500 yards) the 37mm M3 could penetrate 36mm of armour plate, but the later Pz.Kpfw. III and Pz.Kpfw. IV seen in Africa typically had 50 mm of armour in front and could destroy the M6 GMC at far greater ranges. Most M6 GMCs were converted back into + ton trucks.

The second expedient design was the M3 Gun Motor Carriage. a marriage of the M3 White half-track and the 75mm M1897 anti-tank gun, a US development of the WWI "French 75" (Soixante-Quinze). The M3 half-track provided good mobility and reasonable space for the gun. ready ammunition and the crew, but it had several deficiencies - it was fairly high, the armour was only 6.35mm (+ in) and the vehicle was open-topped, which allowed artillery shell fragments to strike the crew and provided no protection against hand grenades

being thrown into the vehicle from ambush. In North Africa, losses in the self-propelled tank destroyer battalions were high and the M3 was replaced during 1943. It did serve well as mobile artillery in Italy and the Pacific.

The M3 and M6 Gun Motor Carriages served to buy time while a purpose-designed and built tank destroyer was developed. Development began in late 1941, but early prototypes were unsuccessful, involving mounting a large 75mm gun on the chassis of the M3 medium tank in various fixed casements. The vehicles all proved too high and lacked the mobility that the Tank Destroyer Command wanted in the new design. Though Gen. McNair was a driving force behind the tank destroyer concept, he had nothing to do with the doctrine or equipment design of the tank destroyers themselves.

T35 GUN MOTOR CARRIAGE

In November 1941 Ordnance drew up plans to build a new tank destroyer on the chassis of the

M4A1 medium tank, resulting in the T35 Gun Motor Carriage. The first model built was based on the chassis of the diesel-powered M4A2. The hull was externally similar to the M4A2, but the armour was made thinner to save weight and increase performance. The glacis was 2 inches (51mm) thick but the sides were reduced to 1 inch (25.4mm). The turret was a circular casting with an open top, mounting a T12 3 inch (76.2mm) anti-tank gun.

Experience in the Philippines campaign indicated the advantage of sloped armour, and the Tank Destroyer Board requested a modified vehicle, lower with sloped armour. This became the T35E1, which had sloped armour all around the hull, 2 inches (51mm) on the glacis and 1 inch (25.4mm) for the sides with + inch (12.7mm) thick skirts added to the bottom of the upper hull. The turret was that of the T35, but proved unsatisfactory due to ballistic issues with the casting. The Tank Destroyer Board requested a further reduction in weight and the glacis was reduced



The lack of a bow-mounted machine gun was a weak spot of the MIO and many crews moved the turretmounted .50 HMG to the turret front or added a second .50 or .30 MG to provide coverage forward. This is one of many such mounts for the turret .50 HMG.



This MIO from the 818th TD Bttn supported infantry from the 5th Infantry Division near Fontainebleu, France in August 1944. The nearest GI carried an MI 57mm "bazooka" anti-tank rocket launcher, the first model used during WWII.



These MIOs of the 634th TD Bttn were seen entering Aachen, Germany in October 1944. The lead TD is a late production MIO with the later turret and no appliqué armor mount bosses. Typical in late 1944, there is more stowage outside the vehicles than inside.



The basic tank destroyer concept was that the vehicles and towed guns were to be used initially from cover to ambush enemy tanks counter-attacking after an initial Allied assault. Heavy camouflage and concealment were critical for successful ambushes.

to 1 + inches (37mm) and the upper sides to + inch (20mm). This was considered acceptable to get the mobility the Tank Destroyer Board desired, since doctrine called for tank destroyers to fight from ambush and not exposed.

The turret was replaced by a welded design. Originally this was to be a hexagonal shape, but problems with the design brought about a simpler pentagonal turret with four sides and the mantlet. By the time the hexagonal turret was ready, the tooling for the pentagonal turret had been ordered, and to prevent further delays, it was adopted for production. Because the designers had considered mounting alternate guns, the trunnion pins were removable, greatly easing the fitting of the British 17 lb gun later in the war.

M10 GUN MOTOR CARRIAGE

The M7 3 inch (76.2mm) gun was carried in the M5 mount. The gun shield was 2 + inches (70mm) thick and the side and rear plates were 1 inch (25.4mm). The hull and turret both had bosses to mount appliqué armour although this was only rarely done, and then only in the field. The turret traverse was manual only and full rotation took about two minutes. This was again not seen as a serious disadvantage in a vehicle intended to be used from ambush, but did prove costly

in combat use. The turret also turned out to be rather unbalanced and initial production vehicles mounted the track grousers on the turret rear to add weight. Later cast counterweights were added. With the needed modifications, the T35E1 was standardized as the "3 inch M10 Gun Motor Carriage" in June 1942. As an aside, the M10 was never named "Wolverine" - no one knows where this came from.

All M10s had 1 inch (25.4mm) lower hull sides and cast transmission housings. Production began at Fisher Tank Arsenal in September 1942 and ran through December 1943. Fisher built 4993 M10s based on the M4A2 dieselpowered chassis. All M10s were

powered by a General Motors 6046 diesel engine (twin GM 6-71 diesel engines joined together) as for the M4A2 medium tank.

In October 1942, Ford Motor Company began production of the similar M10A1 based on the M4A3 medium tank powered by a Ford V-8 petrol engine. Other than changes to the rear deck and hull rear plate, the M10A1 was similar to the M10. Production went to September 1943 and 1038 M10A1s were built. Fisher also built 375 M10A1s through November 1943. and delivered 300 M10A1s without turrets in January 1944 to be completed as 90mm M36 Gun Motor Carriages.



An MIO from the 893rd TD Bttn leads a section through part of the Huertgen Forest near the town of Schmidt in November 1944. The fighting in the Huertgen Forest was the longest bitter and costly battle the US army fought in the NW European campaign.



During the Battle of the Bulge in the Ardennes, US forces successfully defended their lines against string German attacks. Part way through the fighting, the area was largely covered with fresh snow, and many vehicles were camouflaged in white like this MIO.

Think Tank - M10 Gun Motor Carriage



This MIO was from 'C' Co, 629th TD Bttn, supporting the 83rd Infantry Division near Courtil, Belgium in January 1945. Though this vehicle has not been camouflaged in white paint, the fresh snow often stuck to the cold armour plate almost as well.



MIOs of an unknown TD Bttn negotiated the Kall trail during the fighting for the Huertgen Forest, the longest battle of the European campaign for the US Army and one of the costliest, with many reversals of fortune during the several months it continued.



This shot shows the disadvantage of the tank destroyer concept as it was used. The thin armour of the US tank destroyers meant they were vulnerable to most German anti-tank weapons at relatively long range, reducing the effectiveness of their better guns.



The Germans modified five Panther medium tanks to resemble the US MIO for use during the Ardennes offensive in December 1944. Sheet metal covers altered the appearance fairly well, but all these modified tanks were lost

■ TRAINING AND DEPLOYMENT

The Tank Destrover Command was based at Camp Hood (now Fort Hood) in Texas, where tank destroyer training was done. Initially troops trained on the M10 at Camp Hood and then continued their training at unit stations. The vehicles proved to be reliable and had few problems. Training included ambush techniques using cover of varying kinds and group tactics. Much of the training proved to be unrealistic for the fighting in North Africa and losses were higher than anticipated.

As a result of the losses in Africa, in 1943 it was decided to replace the self-propelled tank destrovers like the M10 with 3 inch (76.2mm) M5 anti-tank guns towed by M2 half-tracks. A number of units trained at Camp Hood and elsewhere on self-propelled vehicles and shipped out with towed guns, serving in Italy and NW Europe. The towed weapons were more difficult to emplace and took much more time to move and set up than the self-propelled weapons. In some fluid situations,

like the German advance in the Battle of the Bulge, towed guns were lost when they were overrun.

Of course, many tank destroyer battalions remained in the M10 or other mobile weapons, and a number of infantry divisions had tank or tank destroyer battalions assigned to them for fire support. These assignments as infantry support led to a number of cases of tank destroyers being misused in missions for which they were not suited. To infantry commanders, the tank destroyers looked like tanks and were used in the same way. But the thinner armour and open tops made the vehicles and their crews far more vulnerable to artillery and snipers. In the long battles for the Huertgen Forest, German artillery used air bursts in the trees against US infantry and these were deadly to the unprotected crews of M10s. German tanks and anti-tank guns firing from ambush knocked out many tank destroyers, and the thin armour was not proof against even second-rate or obsolescent

DEVELOPMENTS

During production there were several changes to the design. The most useful was a redesign of the turret rear plates to add more room for the crew and stowage, with larger counterweights to balance the turret better. Also, late production M10s did not have the bosses to mount appliqué armour, as the US army had never used them. Additionally, there were changes made by the crews and field depots. In North Africa, field expedient counterweights were added to early M10 turrets to balance the turret, before factory weights appeared. The lack of a bow machine gun left the forward area of the M10 poorly protected. The .50 Browning M2HB HMG had been mounted at the rear of the turret to improve weight distribution, but many crews moved this gun forward over the breech for coverage in front. Other crews left the .50 in place and added another .50 or .30 weapon on the turret front roof. The danger from overhead fire led to the design of field-built roof covers from thin armor, and later factory kits for this appeared.

The wet weather in late 1944 and spring of 1945 led to the adoption of extended end connectors (EECs) to widen the tracks and improve flotation. To fit these onto the tracks on M1Os, the lower skirts on the sides had to be cut away. The M10s used every type of track used by US armoured vehicles and with a weight almost that of the M4 medium tank, its cross-country performance was similar.

As the number of German tanks and other heavy armoured vehicles decreased, M10s were often used as field artillery just as most tanks were - indeed, in 1945, the original concept of the tank destroyer as a stealthy weapon used from concealment in ambush had been abandoned and the majority of M10s in the last six months of the war were used as infantry support, augmenting the M4 medium tanks designed for that role. As the war progressed. heavier armour on German tanks and AFVs made the M10's main gun



This MIO of an unknown unit was photographed crossing the Our River in Belgium in late 1944. The extensive stowage was typical, and this vehicle is somewhat unusual in retaining the D-Day hedgerow cutting device welded to the transmission cover.



These MIOs were photographed in Muenchen-Gladbach, Germany in March 1945, during 'Operation Grenade' in the final drive into the heart of Germany. The sandbags around the hulls were covered with



This MIO was seen in Querceta, Italy in the spring of 1945. The vellow circle '30' on the bow plate was the bridging weight badge, denoting the weight allowance. Fewer German tanks in Italy meant US tanks used less added armor and sandbags than in NW Europe



Another old veteran, this MIO of 'B' Co, 644 TD Bttn entered Duren, Germany in March 1945. It also retains the hedgerow cutter from Normandy, plus the added stowage and sandbags that personified the US Army during the final months of the war.

less effective, though the axiom proved true that the side that shot first usually won the engagement. The original concept of shooting from ambush proved effective in this role. However, the average range of tank engagements in Europe in WW2 was only a bit over 800 yards (730 meters), and at that range the 76mm M1 of later M4 mediums and even the 75mm guns of earlier M4s could often penetrate the sides and rear of most German armoured vehicles except the heaviest examples, like the Panther, Tiger and Tiger II. The belated introduction of T4 High Velocity Armour Piercing (HVAP) ammunition, originally intended for the tank destroyers, was to give the 76mm M4 medium better firepower than the M7 3 inch gun of the M10 could achieve.

Thus, even before the fighting ended in Europe, the unique role of the tank destroyers had been eclipsed and the tank destroyer battalions were often used just as the medium tanks were. The tank destroyer concept did not last after the war, as the contention of the Armoured Force that the best anti-tank weapon was a better tank had proven correct, and future armour development in most

countries focused on designing more effective tanks. Surplus M10s and other tanks destroyers were supplied to allies after the war, and were popular for their reliability and relatively light weight that allowed their use where local bridges were restricted.

In 1942, the pilot model of the M10 was still at Aberdeen Proving Ground as a test

and developmental vehicle. In November 1942 it was fitted with a T7 90mm gun to determine if the larger weapon could be carried. Tests were largely successful, though a new turret was needed to provide adequate space for

the crew and larger gun breech. This in turn led to the T71 Gun Motor Carriage built on the M10A1 chassis. In July 1944, it was standardized as the M36 90mm Gun Motor Carriage - but that is another story... ■



The No. I pilot model of the MIO was retained at Aberdeen Proving Ground for development testing. In 1942, Ordnance mounted and successfully tested a 90mm MI gun in the MIO pilot. This led to the 90mm M36 Gun Motor Carriage in late 1943.



Hot on the heels of their Porsche Turret release, **Graham Tetley** reviews Zvezda's Henschel turret King Tiger in 1:35 scale.

HENSCHEL TURRETTIGER II

he Tiger II was the successor to the Tiger I, combining the latter's thick armour with the armour sloping used on the Panther medium tank. The tank weighed almost 70 tonnes, and was protected by 100 to 185 mm (3.9 to 7.3 in) of armour to the front. It was armed with the long barrelled 8.8 cm KwK 43 L/71 anti-tank cannon. The chassis was also the basis for the Jagdtiger turretless tank destroyer.

Henschel won the design contract, and all Tiger IIs were produced by the firm. Two turret designs were used in production vehicles. The initial design is often misleadingly called the "Porsche" turret due to the belief that it was designed by Porsche for their prototype. In fact it was the initial Krupp design for both prototypes. This turret had a rounded front and steeply sloped sides, with a difficult-to-manufacture curved bulge on the turret's left side to accommodate the commander's cupola. Fifty early turrets were mounted to Henschel's hull and used in action. The more common "production" turret, sometimes called the "Henschel" turret, was simplified with a significantly thicker flat face, no shot trap (created by the curved face of the earlier turret), and less-steeply sloped sides, which prevented the need for a bulge for the commander's cupola, and added additional room for ammunition storage.

The Tiger II was issued to heavy tank battalions of the Army (Schwere Heerespanzerabteilung - abbreviated s.H.Pz.Abt) and the Waffen-SS (s.SS.Pz.Abt). It was first used in combat with s.H.Pz. Abt. 503 during the Normandy campaign on 11 July 1944 on the Eastern Front, the first unit to be outfitted with Tiger IIs was the s.H.Pz.Abt. 501, which by 1 September 1944 listed 25 Tiger IIs operational.

Hot on the heels of the 'Production' Henschel version reviewed by me a few issues ago Zvezda have now followed that up with the Porsche turreted version. Again, we do not have a Zvezda original, but what is in the box is the Dragon '6189' King Tiger that was first released in 2004.

Most of it is identical to the previous King Tiger with the only difference being the turret. Coming in a big, sturdy box we are greeted with many sprues, some nylon string for the tow cables, nylon mesh and decals for 2 vehicles. Moulding quality throughout is good although there is a little flash here and there, especially around the track links. The instructions are clearly drawn and uncluttered.

It represents a standard Porsche King Tiger without zimmerit seen on all fronts from 1944 onwards. The track guards

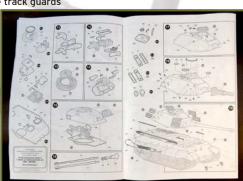
are moulded in one piece so surgery is required if you want to represent battle damage. The tracks come as two sets of links that need careful assembly. When I built this kit way back when I found that the fit was improved if you removed the mould separation lines from the contact surfaces of the smaller link, part G2.

For me there is just one area that is not so good about this kit (the same as the previous King Tiger in fact), which is that we are given some nylon mesh and a pattern on the instructions from which we are supposed to cut out the engine grilles. Because the shapes are complex and difficult to cut, and there is very little spare mesh, I feel that this is poor. Most will, I believe, seek out a photo-etched fret.

It compares well to the competition out there but the price is especially attractive as you can pick it up for under £25 in the UK, and for less than £20 on eBay from within the EU including postage.

The basic kit is sound and good value for money, but I do feel that it is let down by the nylon mesh and no photo-etch. I would give it a recommended.

Thanks to The Hobby Company Limited for the sample www.hobbyco.net



Nice clear instructions.



Sleek and sexy!



Turret top detail



Turret spru



kout marks on the Trac



Track link detail.



Road wheel detail.



One-piece track guards.



l prefer photo-etch and picture wire.



Decal options.









Keep your **Model Military International** collection safe in a high quality binder. Each binder holds 12 issues.

Just £8.50 + p&p

(UK - £2.45, Europe - £4.45, Worldwide - £6.45)

Available direct from our offices on

+44 (0)1525 222573

or online at:

www.modelmilitary.com



Print Your Own Display Plinths...





1:32 1:48 1:72 1:144 1:200 1:4

Instant Download .PDF Files!

www.SCALEMODELSCENERY.com

Mirror Models - Reflecting Reality

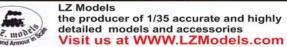








May, June, July 2016



Brett Green gets his hands on a test shot of Tamiya's all-new 1:35 scale U.S. M10 Tank Destroyer.

he M4 Sherman was the backbone of American and British armour forces by the time of the Allied campaigns in Italy and North Western Europe. The Sherman was a hard working tank available in vast numbers thanks to American massproduction techniques and it could hold its own against its German contemporaries, the Panzer III and Panzer IV. However, the 75mm main gun was ineffective against the German heavy tanks, the Panther and the dreaded Tiger.

American armoured doctrine called for the use of specialised tank destroyers - heavily armed and highly mobile vehicles dedicated to blunting German armoured breakthrough. The M10 tank destroyer was the first of these dedicated vehicles. It was based on the chassis of the M4A2 Sherman with new sloped hull armour and an open topped turret fitted with the M7 76mm anti-tank gun.

After seeing service in North Africa and Italy, the M10 was used extensively in France following the D-Day landings of 6 June 1944. The 76mm gun fitted to the dedicated US Tank Destroyer, the M1O, did not fare well against Tigers and Panthers, but in the drive through France, Belgium and Germany, the M10 was increasingly used in the infantry support role.

More than 4,900 M10s were manufactured.









■ IN THE BOX

Tamiya has expanded its WWII Allied catalogue with a new 1:35 scale M10 Tank Destroyer. This kit has nothing at all in common with the old motorised M10 released in the 1960s.

I was fortunate to receive a white-box test shot of this kit during my recent visit to the Shizuoka Hobby Show. This is not the final product, but it is probably pretty close. The most noticeable difference between this kit and the final version that you will see in the shops is that my sprues are light grey and yours will be olive green.

Tamiya's 1:35 scale M4A3E8 Easy Eight Sherman test shot sprues comprise 324 parts in light grey plastic, ten parts in clear, two lengths of polypropylene tracks, 4 small and 4 large polythene caps, a length of string and markings for two vehicles.

The kit is almost all new, including the VVSS running gear and tracks.

The only recycled sprues are the .50 cal machine gun, which dates from 1998, and the clear sprue, which includes generic light lenses and crew goggles.

Crisp surface detail is present throughout including convincing cast texture on the transmission cover.

Weld beads are subtle, and tiedowns are moulded directly to the turret.

Like the rest of the kit, the running gear is brand new. The mid-style Vertical Volute Spring Suspension (VVSS) bogie units feature straight return roller arms, packed roller mounts, and fulllength flexible T51 rubber block tracks. The pressed metal road wheels are made up from a main section and an insert for the rear. Each tyre is moulded to the main plastic section.

The drive sprocket and idler wheel are attached via polythene caps.

The lower hull is made up from a "flat pack" arrangement of separate floor, sides and engine firewall. The fighting compartment floor is built into this sub-assembly.

The two identical sponson blanks are cleverly moulded symmetrically from front to rear. Ammunition stowage is mounted on the top side of the sponsons.

Detail on the full-length flexible tracks is very crisp and clean on the outside and edges. Even on the





The vent is moulded in place on the engine deck. Note the "donuts" which locate the separate bosses



The kit features nice cast texture on the transmission cover and mantlet



The road wheels and idler wheels are made up from two plastic pieces each





The full length flexible tracks are well moulded and nicely detailed.



The distinctive hull an turret bosses are supplied as separate parts. This is a view from the rear.



Three very well sculpted figures in action poses are included



The .50 cal machine gun is the only sprue that has appeared in an earlier kit.



The clear sprue features headlight lenses and goggles for the crew.



Kit markings are supplied for two options, both in overall Olive Drab.



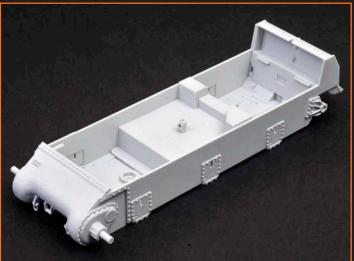
The flat-pack lower hull, including the fighting compartment floor with its non-slip texture.



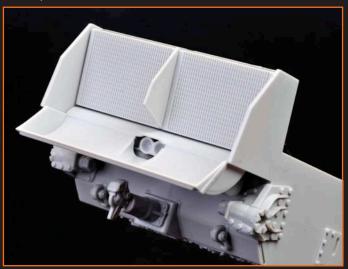
My early test shot was missing two raised locating pins on the inside of the hull floor. I marked these carefully before gluing the raised fighting compartment floor in place.



The lower hull coming together.



Lower hull complete.



Radiator and exhaust detail will be mostly hidden when the upper hull is fixed in place.

inside of the blocks there is no sign of ejector pin marks or flash, only a small circle on every twelfth link. It is also interesting to note that the way the track ends join differently on this model. Instead of locating pins and holes, each track features two slightly raised squares and two corresponding recessed squares on the other side. This should ensure a nice flat join.

Note that the idler wheel mounts are also workable track tensioners. Do not glue these parts in place initially, as you may want to swing the arms to tighten the vinyl track when it is installed.

The clear sprue includes a number of generic

parts that you will not need, but the headlight lenses and goggles will come in handy.

The hull crew hatches may be posed either open or closed. Tamiya supplies a toothed turret race that is fitted in two parts to the lower hull.

40 individual armour bosses are supplied for the outside of the hull and the turret. Each has to be cut away from two sprue attachments, so some care will be required to maintain their circular shape.

The turret interior provides a nicely detailed 76mm gun breech, racks, boxes, stowed ammunition, gunsight crew seats, stowed Thompson sub-machine gun and more. This

should look suitably busy.

......................

The 76mm gun barrel is moulded in one piece with a hollowed out muzzle. A .50 cal machine gun may be mounted at the rear of the turret, and string is supplied for the tow cable.

The decal sheet offers two options, both American and both in overall Olive Drab.

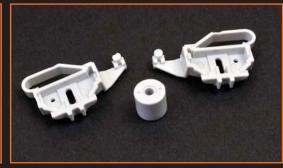
The package is rounded out with three nicely animated crew figures posed in the process of aiming, loading and firing the main gun. Moulding quality, fabric drape and facial details are very good. I would not hesitate to use them straight from the box with only the addition of straps for the goggles.



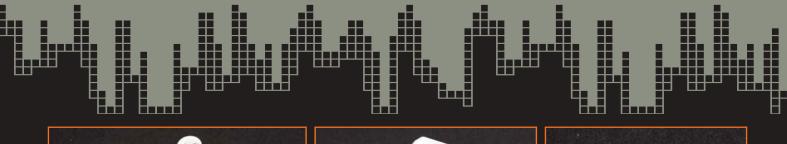
The two-piece idler wheel parts.



A polythene cap is trapped between the outer and inner drive sprocket parts.



The VVSS bogie units are very well detailed and supremely simple to assemble. Here is step one - the return roller will be trapped between the straight arms.





Next, the road wheels will slide onto the lower bogie halves, and the sub-assembly will be added to the upper bogie section.



The final step is to add the inner and outer covers.



This is how the inside of the cover should look like before it is glued to the outside of the bogie unit.



One completed VVSS bogie...



...and one side of the running gear ready to attach to the lower hull.

CONSTRUCTION

In common with Tamiya's recent releases, construction of this new 1:35 scale M10 finds it totally viceless.

Basic construction followed the sequence of Tamiya's instructions.

The new VVSS bogie units are made up from 12 pieces each including the two road wheels, and they are a pleasure to assemble. Springs are not workable, but what we lose in poseability, we more than make up for in ease of assembly.

The kit's full-length flexible tracks are equally nice. As the Sherman featured live tracks, there was no sag along the top run so there really is no downside to the vinyl tracks here. The tracks were looped and glued using Revell Contacta cement, then taped to a small cutting board and left to set overnight.

I was concerned that the separate hull and turret bosses might be a bit tricky to clean up but they really were no trouble at all. I did take the precaution of applying a wide piece of tape to the bosses while they were on the sprue so they did not spring off into the realm of the carpet monster as I was cutting them off.

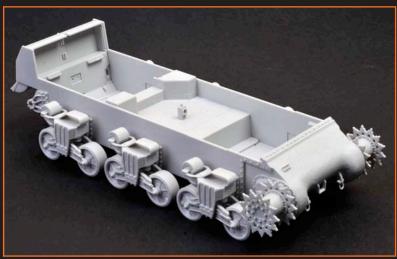
I did not glue the lower and upper hull subassemblies at this stage as I wanted to retain access to the interior for painting.

Once basic construction was complete there were no gaps visible.

The accompanying photos and captions will fill in the rest of the details.



Final drive cover.



The running gear and completed lower hull.





while setting.

A toothed sprocket ring is supplied in two pieces.



A number of locating holes must be drilled out before assembly of the upper hull. Check the instructions carefully before gluing the parts.



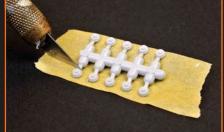
Stowed ammo tubes are glued to the top of the separate sponson covers. Upper hull interior parts fitted.



It's time to test fit the tracks. ...and the upper hull. The upper hull has not been glued in place at this stage to make painting easier.







The individual bosses were cut from the sprues and cleaned up. I pressed the bosses on a piece of masking tape to prevent them



Bosses and stowage rack in place on the upper hull.



Tools, grousers and other details have been fitted to the upper hull in accordance with the instructions.







In common with Tamiya's recent releases, construction of this new 1:35 scale M10 finds it totally viceless...,

................



Turret interior detail parts.



The main gun may elevate and depress thanks to polythene caps. Shell stowage and other details fitted to the turret interior sidewalls.



The turret shell has been assembled and just awaits installation of the mantlet and The completed turret.





Plenty of the breech is visible through the open turret top.

The upper hull fits perfectly even

without glue.



CONCLUSION

Tamiya brings their easy building philosophy to a VVSS Shermanbased vehicle for the first time.

Tamiya's 1:35 scale M10 Tank Destroyer is a well detailed model with a nicely fitted out turret and a set of crew figures that lifts it into the category of instant vignette. The decision to include full length flexible tracks is entirely appropriate considering the tracks are "live" on VVSS suspension and were therefore stretched taut while fitted to the vehicle.

We can only hope that the new VVSS suspension finds its way onto other M4 variants from Tamiya in the future!

Modelspec

Tamiya 1:35 U.S. Tank Destroyer M10 Mid Production. Kit No. 35350

Accessories and Decals:

DEF.MODEL Item No. DM35042 - 1:35 U.S. U.S. M10 GMC Stowage Set

Tools and Materials Used:

Tamiva Extra Thin Liquid Cement Revell Contacta Professional Cement Selley's Supa Glue Tamiya 10mm Masking Tape Microscale Industries Kristal Klear Iwata HP-CH and HP-C Plus Airbrushes

Superb fit; straightforward build; high level of detail; excellent crew figures in appropriate action poses.

X Nothing worth mentioning.

Available from

Thanks to Tamiya for the sample www.tamiya.com Tamiya kits are distributed in the UK by The Hobby Company Limited www.hobbyco.net

Rating •••••••

Next Time

Next time Brett adds stowage; paints and weathers the model and adds the three Tamiya crew figures to the M10.

ALTIMASI IS

Subscribe today and receive one of two subscriptions





We have teamed up with you a special gift for subs There are one of two gift **Craft tool sets are perfec** have just started modelli

This offer is available to l If you are an existing sub current subscription for subscription runs out, RE

MODEL CRAFT OPTION 1

15 Piece Craft & Model Tool Set

A 15-piece tool set that has everything you need for craft, model making, repairing and small general tasks. The A5 size self-healing mat is a perfect addition as it ensures no cracking or warping when using the blades, preventing any cutting errors and preserves the life of blades!

- 1 x Side cutter
- 1 x Snipe nose Plier
- 1 x Modellers knife with no.11 Blade
- 5 x no. 11 spare blades 1x Flat hobby file
- 1x Flat end tweezers
- 1x Bent nose tweezer

- 2 x Grip clamps: 2 x 2" (50mm)
 1 x Grip clamps: 1 x 3" (75mm)
 1 x A5 size self-healing cutting mat

* Terms and conditions

You must be aged 18 and over to be eligible for the knife sets. While stocks last.

ADH Publishing will send out the preferred gift option unless it is no longer in stock, at which time the alternative will be sent.

Customers attempting to take out this offer after all stock is gone will be contacted before any money is taken. Subscriptions taken out with this offer will not be refunded if cancelled

MODEL CRAFT OPTION 2

9 Piece Plastic Modelling Tool Set & 16 Piece Precision Craft Knife Set The 9 Piece Plastic Modelling Tool Set is ideal for plastic modelling and other craft & hobby applications,

and includes:

- Plastic Sprue Cutter for cutting & snipping sprues and parts on plastic kits, eg. planes, cars, boats, military models and figures, etc.
 Mini Flat File - for filing and smoothing off burrs or excess material.
 Craft Knife - for cutting out shapes, decals and general craft/hobby tasks.
 Self Healing Cutting Mat - protects work surface and extends blade life.

The excellent Precision Craft Knife Set comes complete with a choice of 3 knife handles & 13 various blades, ideal for hobby, craft and professional tasks. The knives can perform fine angle cuts & precise trimming, cutting, carving, sawing, gouging & shaping. All packed in a handy storage case.

Includes:

Classic craft knife #1, Medium duty hobby knife #2 & Plastic handled craft knife #5

Blades to fit the #1 handle

- 1x General purpose curved blade #10
- 2x Classic Fine point blades #11
 1x Scoring blade #16
- 1 x Chiselling blade #17

Blades to fit the #2 & #5 handle

- 2x Large fine point blades #2
- 1x Chiselling blade #18
 1x Angled chiselling blade #19
- 1x Large curved carving blade #22
- 2x Deburring blades #24
 1x Stencil edge blade #68

its worth £20 RRP!





both NEW and EXISTING subscribers. scriber, we will simply extend your a further 2 years, so do not wait until your **NEW TODAY while stocks last!**



2 YEAR MMI SUBSCRIPTION

GIFT OPTION 1 Please choose which gift you **GIFT OPTION 2** would prefer as your first choice. SurnamePost/zip code Telephone Number.....

2 year subscription:- UK; £88, Europe; £112, Worldwide; £138

Cheques payable to: ADH Publishina Ltd

enewal/Extension New Subscription Starting with issue No
lease debit my credit/debit card for £
Mostro only
xpiry date

Please call our subscription line or mail this form, or a copy, to;

ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX, United Kingdom (Photocopies of this form are acceptable)

WEATHERED WHIPPET

n the ongoing race of Eastern kit manufacturers, Meng came second to the finish line with their 1:35 scale Mark A. However, it is difficult to judge whether this allowed them to offer a more refined replica than the one manufactured by Takom, as both kits are very different, despite representing the very same vehicle. Each of the new 1:35 scale Whippets has its highs and lows, but in this article, I'll focus on Meng's release.

From the very beginning, Meng

seems to mimic Tamiya kits, both in terms of instructions and kit design. This one proved to be no different. The kit comes in a stylish box, filled with numerous sprues, moulded from beige plastic.

The assembly guide is sufficiently clear, although it would be easier to follow if full colour names were included, instead of referring to paint code numbers only.

A small decal sheet includes markings for at least seven different vehicles. However, only two tanks are depicted in the

painting guide, whilst the remaining ones are left to our own research.

The plastic sprues make a very good first impression. A large part of the hull structure is provided as a single piece, which simplifies the construction process.

Details are crisp and free of any moulding defects.

A few parts may be considered over-simplified, but this is just another sign that Meng designers consistently follow Tamiya's philosophy, giving priority to the ease of assembly.

Worth noting are the quality and finesse of the machine guns, which are even supplemented with separate ammo belts. This is quite surprising, considering that otherwise, the interior is not represented at all, whilst the only visible parts of the guns after completing the kit, will be their barrels.

Thanks to the use of slidemoulding technology, each track link is a separate part, which is ready for further assembly, straight after cutting it from the sprue.



Kamil Feliks Sztarbala adds detail and heavy weathering to Meng's recent 1:35 scale Mk.A Whippet British Medium Tank.

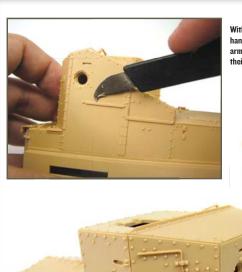
Since I'd had a set of white metal tracks from Friulmodel (#ATL-146) in my stash for a while, I decided to check if these would be a reasonable alternative to Meng's tracks, bearing in mind that the former had been designed to fit the old Emhar kit.

Inside the small white box, which is standard packaging from this Hungarian manufacturer, I found not only the cast metal track links, along with a length of brass wire for the track pins, but also the drive sprockets and idler wheels.

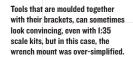








With the real tank, the grouser hangers stand slightly off the hull armour. To mimic this, I scribed their edges with Trumpeter's tool.



I replaced these simplistic details with pieces of 0.25mm styrene strip.



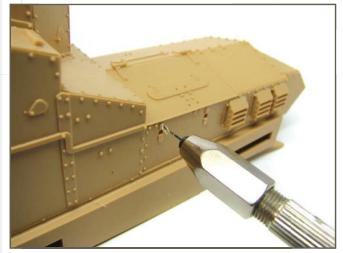
The exhausts demanded more attention. Firstly, I hollowed out their ends and removed the mounting brackets.



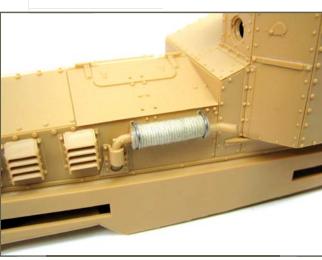
I then reproduced the exhaust insulation by wrapping lengths of thick thread around the plastic parts, which surface had been previously softened with Tamiya Extra Thin Cement.



The thread was sealed with a few drops of cyano, in order to prevent it from unwinding.



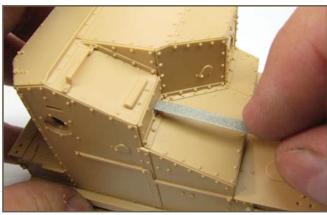
Afterwards, I had to recreate the brackets. I started by drilling the mounting sockets on the hull, using a 0.5mm drill, held with a pin vise.



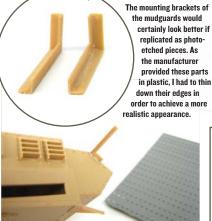
Once I'd glued the exhausts into the correct position, I fitted lengths of 0.5mm tin wire within the previously made sockets.



The driver's vision slit also required hollowing out. I drilled a few small holes adjacent to each other...



...and thinned down their edges, using a micro file from Hobby Elements.

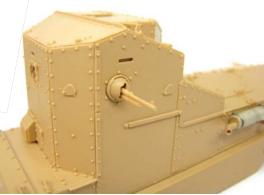


The mounting bolts that were not featured in the kit, were sourced out from Meng's SPS-007 'Nuts and Bolt Set B'.

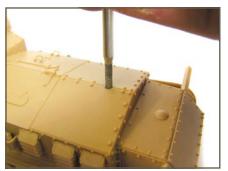




The rings that hold the MG mounts, were very fragile. To avoid damaging these parts, I carefully cut them from the sprues, using a razor blade.



Upon test-fitting the armament, it once more became apparent that Meng's employees



The designers can only be praised for ensuring trouble-free assembly, as well as accurately replicating the Whippet preserved at Bovington. However, using a museum exhibit as the basis for the kit design. usually means the risk of copying some features that were not originally present on the particular subject. In the case of this kit, we must remember that the coolant filler needs to be recreated. To this end, I milled out a shallow aperture...



and inserted the inlet, made from a slice of thin styrene rod, into the hole.



I also added the missing bolts in this area, using Meng's SPS-007 'Nuts and Bolt Set B' again.



As I planned to replicate a particular example of the Whippet, in accordance with an archive photo, I had to slightly modify the kit. It was necessary to plug the mounting holes intended for the hooks that held the towing cable, using lengths of 0.5mm styrene rod.



In this case, super glue was used for gluing these rod lengths, and it served as putty too. Once I'd cut off the excess rod, I only had to carefully smoothen the area with fine sandpaper.

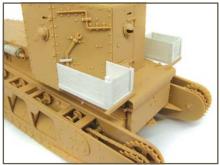




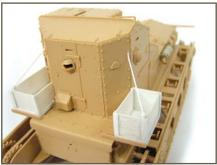
The main defect of Meng's Whippet is the boxes. Takom did include these in their kit, whilst I was forced to build them from scratch for mine. I began by creating the frames from various pieces of styrene rod of 2mm width, cut into angles at their ends, to facilitate the joints.



Next, I scribed a large piece of 0.75mm styrene sheet in a random manner, to reproduce the wood grain, and cut this into nieces of the correct size. These will form the walls of the boxes.



The finished boxes were glued to the hull...



and supplemented with reinforcing struts, made from lengths of The last details to be added, are the holders for the spare track link. 0.5mm styrene rod.



******The main defect of Meng's Whippet is the lack of rear stowage boxes. Takom did include these in their kit, whilst I was forced to build them from scratch for mine...,





My references indicated that 'A290' was named 'Cherubim II'. As the areas where the names had been placed, were hidden under the stowage on the only photo of this tank, I asked to design the inscriptions that would be similar to those featured on the wellknown example of the Whippet from the same unit; ie. 'Caesar II'. Again, I had to test-fit the design before printing the decals.



STOWAGE

When building a kit, I usually try to depict a certain subject on the basis of available photographic reference. This was to be no different in the case of my Whippet. My main inspiration was a well-known photo showing a tank coded 'A290', which was nicknamed 'Cherubim II' and belonged to a section of the 3rd (Light) Battalion, Tank Corps, that had been commanded by Lt. Cecil Harold Sewell. In accordance with this picture, I had to make a number of modifications during the assembly stage, and most of all, add the distinctive and varied quantity of stowage.



At the very beginning of this step, I checked my stash and selected some suitable boxes, bags, etc. These were sourced from various Armo sets, Reality in Scale's 'WWII Postal Bags & Accessories' set, and spare parts from already built models. I also purchased a set of resin 2 Gal. British "POW" Canisters from PanzerArt.



The process of arranging the stowage was started by placing the canisters on the front part of the vehicle. I hung them on a length of wire, and fixed them together with cyano.



Upon closer inspection of the archive photos, I eventually discovered that the fitting on the superstructure roof was yet another holder for a spare track link



To adjust the latter, I had to sand it significantly, and slightly shorten one of its edges.



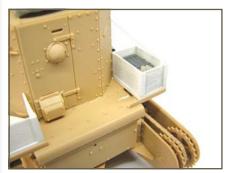
Another cluster of canisters was assembled in a similar manner. At this stage, it was important to prevent the canisters from looking as if they were attached with magnets.



Next, I pre-arranged the stowage on the roof.



Once I'd determined the correct arrangement, the particular components were glued together and subsequently wrapped with a piece of paper tissue, slightly dampened with white glue.



Moving onto the rear of the tank, I removed a few surface details in order to fit a resin bag between the box and rear door.



The bottom of the bag had to be adapted to the irregularities of the surface. I applied some two-part epoxy putty from Mr.Hobby..



...and adjusted the bag to the kit. To prevent the puttied surface from sticking to plastic, I lubricated the former with a tiny amount of oil.



I then created another bag from scratch, by wrapping a piece of paper tissue around a small block of epoxy putty.



The paper was soaked with a mixture of white glue and water, allowing for easier shaping.



The final touch was to pose the bag within the wooden box, in a convincing way. This required re-modelling the shape of the bag in a few places.



At this stage, I also pre-arranged the equipment inside the second box. In this case, the components were not glued together.



Most components were of course left senarate for the painting process.

I temporarily attached them to hypodermic needles and matchsticks, and sprayed an even coat of AK-Interactive AK178 'Black Primer' over all elements.



The metal fittings of the track grousers were airbrushed with a mixture of Uschi van der Rosten 'Metal Polishing Powder Steel Type' and Mr.Color thinner.



To give them a more natural look, I had to polish the $\,$ metallic surfaces with a plastic brush.





...whilst for the bags, I used acrylic paints sourced from another excellent set of this Italian manufacturer, namely greenish tones from Lifecolor CSII 'US Olive Drab' set. CS28 'Hemp, Ropes and Tarps'.



The tarps and rags were brush painted with various



The canisters required a more elaborate treatment. I firstly applied a layer of AK-Interactive AK088 'Worn Effects Fluid' over them. This was followed by airbrushing a basecoat of Tamiya XF-62 'Olive Drab'. Once I'd added some damage to the paint layer, taking advantage of the properties of the AK-Interactive's chipping fluid, I emphasized the details with AKO45 'Dark Brown Wash'. The final touch was to apply a little MIG Productions ${\bf P410}$ 'Oil and Grease Stain Mixture' around the canister plugs.



The indispensable tea kettle was sprayed with AK-Interactive AK478 'White Aluminium', and subsequently treated with AK075 'Wash for NATO camo vehicles'. Afterwards, I replicated some fume stains and burn marks using Vallejo's 70950 'Flat Black' and 70939 'Smoke' acrylics.



As the assembled track runs tended to break up, I decided to glue the links together. The use of Tamiya Extra Thin Cement for this task, allowed me to lay the tracks over the running gear and give them the correct shape.

PAINTING

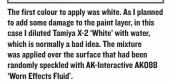


Next, I applied a basecoat of Tamiya XF-49 'Khaki', but instead of spraying an even layer of paint, I built up the colour by airbrushing meandering lines and streaks in such manner that the dark priming coat still showed through here and there, merging with the base colour.

Some chosen surfaces and details were highlighted with thin lines and patches of Tamiya XF-55 'Deck Tan', applied in a way similar to the popular colour modulation method.



I then prepared the model for painting the white-red-white British recognition stripes. This was done by masking off the adjacent areas with Tamiya tape and pieces of plasticine.



Bearing in mind that a typical dull red would become rather dark and depressing after further painting and weathering steps, I painted the red stripes with Mr.Color C079 'Shine Red'.

Afterwards, I scratched the chosen areas using a brush, toothpick and a steel wire brush. The use of various tools allowed for creating realistic damage to the paint layer, ranging from fine abrasions, to intense chips and scratches.





Next, I airbrushed a layer of gloss varnish over those areas where the decals would be applied. The latter were printed by 'Melius Manu', a small company from Poland that specializes in custom-made decals and masks. Due to the peculiar technology of printing, these decals had to be sealed with a generous amount of water-based clear varnish.



In accordance with the archive photo that showed a significant difference in the clarity of these particular markings, I airbrushed a filter of heavily diluted Tamiya XF-49 'Khaki' over



On the other hand, the large '9' numbers were re-touched with matte white paint. I purposely left some very fine streaks of paint slightly visible, in order to give an impression of handpainted markings.

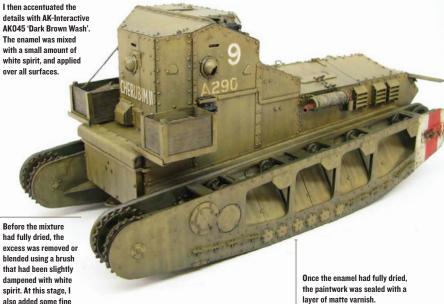








I could now brush paint the black stripes that had helped to disguise the location of vision slits.





also added some fine vertical streaks.

Another inspection of the reference photo revealed that I had somehow missed the fact that one of the outer hull panels was missing. "Better late than never", I thought, and removed it from



The edges of the resulting aperture had to be thinned down from the inside. What's more, I had to replicate an angled metal plate in this location. I cut a piece of 0.25 mm styrene sheet, and placed it inside the aperture, making me feel like a bottled-ship builder.

The track runs were primed with a layer of Tamiya XF-I 'Flat Black', and subsequently pre-rusted by applying Lifecolor UA701 'Rust Dark Shadow' in a similar fashion to that of doing a wash.



WEATHERING



The weathering process was begun by replicating the damage to the paint layer. For fine abrasions, I used heavily diluted Vallejo 70883 'Silver Grey' whilst more intense paint chips were added with A.MIG-044 'Chipping Color'.



Naturally, I didn't forget about the places where the track grousers were mounted.



As the lower hull was to be heavily weathered, the chipping effects in this area had to be less subtle too.





Next, I created some vertical streaks by wiping some pigment from the 'deposits' layer, with a brush that had been dampened with white spirit.



A custom-made tool (or simply, a purposely damaged toothbrush) was used to speckle the lower areas with more 'deposits'.



I soaked a brush with white spirit again, and blended the previously applied 'dots' of 'deposit' products in a vertical motion, creating additional streaking effects.



The upper surfaces of the vehicle were dirtied with AK-Interactive AKO82 'Engine Grime'. I diluted the enamel with white spirit, and airbrushed a number of stains here and there.



Afterwards, I removed the excess enamel with a cotton bud, that had been dampened with a tiny amount of white spirit. The preliminary weathering step was now complete.



At this stage, I wanted to attach the stowage, However, I had to finish the top surfaces of the kit before this. Some chosen edges and larger paint chips were emphasized with an 8B pencil, in order to give them a bare metal look.





The tracks received a random application of AK-Interactive's products from AK4IIO 'Crusted Rust Deposits' set and AK4062 'Light Dust Deposit'.



To enhance the dirt texture, I brushed a mixture of AK-Interactive AK08I 'Dark Earth' and A.MIG-3004 'Europe Earth' pigments onto the tracks and lower hull surfaces and sealed them by airbrushing a misted application of AK-Interactive AK048 'Pigment Fixer'.



Next, I rubbed the running surfaces of the tracks with an 8B pencil in order to add a metallic sheen. This allowed me to attach the track grousers. If added earlier, they would hamper the weathering process.



The distinctive vertical streaks on the outer hull panels were replicated using a very fine brush and MIG Productions P220 'Dark Wash'. To get a variety of tones and hues of the particular streaks, I mixed the enamel with white spirit in different ratios.



 $\textbf{A.MIG-1408 'Fresh Engine Oil' was used not only to reproduce the fuel stains and spills but also for the following the product of the pro$ recreating the traces of grease on the machine gun mounts. A subtle effect was achieved by thinning down the enamel product with white spirit.



Finally, I added some staining, aft to the exhausts. For this purpose, I airbrushed a misted application of AK-Interactive AK075 'Wash for NATO camo vehicles'.

Modelspec

Meng Model 1:35 Scale Mk.A Whippet British Medium Tank. Kit No. TS-021 Meng Model 1:35 Nuts and Bolt Set B. Kit No. SPS-007

Tools and Modelling Products:

Tamiya Extra Thin Cement

C.A. Glue

Styrene Sheet, Strip and Rod

Tin Wire

OLFA & Trumpeter Scribing Tools Hobby Elements Micro Files Tamiya Masking Tape

Paints and Finishing Products:

Paints:

- Tamiya (acrylic)
- Mr.Hobby
- Lifecolor
- Vallejo
- AK-Interactive
- Ammo of Mig Jimenez

Mr. Hobby Clear Varnishes

8B Pencil

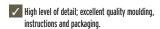
Talens White Spirit

Uschi van der Rosten Metal Polishing Powder

Steel Type

AK-Interactive weathering products:

- AKO45 Dark Brown Wash
- AKO48 Pigment Fixer
- AKO75 Wash for NATO camo vehicles
- AKO81 Dark Earth
- · AK082 Engine Grime
- AKO88 Worn Effects Fluid
- AK4062 Light Dust Deposit
- AK4063 Brown Earth Deposit
- AK4110 Crusted Rust Deposits
- Ammo MIG weathering products: • A.MIG-1408 Fresh Engine Oil
- A.MIG-3004 Europe Earth
- MIG Productions weathering products:
- P220 Dark Wash
- P410 Oil and Grease Stain Mixture



X Stowage boxes not included.

Available from

Meng Model kit are available online and from hobby stores worldwide.

Rating ••••••







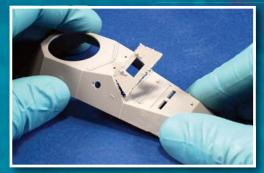


Construction Begins

The BA-64 from MiniArt, is a typical product from this Ukrainian company.

The kit is presented in a small size box with great box-art. Once the box opened, we are presented with several plastic sprues, clear and concise instructions, top class decals, clear parts and a small photoetch sheet.

To represent this specific vehicle, the front panel must be removed. The best approach is drilling several holes around the part to be removed. All those holes will define a line and will turn this process much easier.



Once all the small holes made, all we need to do is gently pass an ultra-fine saw over them and soon the part can be removed. This process demands some extra care, because if we lose the saw control, we can damage the kit.



To finish the process, all we have to do is pass a sanding stick and smooth



The interior is well detailed and the construction very straightforward. To reach all the small details, I usually use Deluxe Materials Plastic Magic Glue. For the best results I use their Pin Magic applicator. Pin Magic applicator will allow an ultra-control, because the Plastic Magic Glue is ultra-thin. Being so thin, is ideal to work as capillarity.

The underside of the model is also very well detailed. The building approach is the same as used in the interior.

Painting and Weathering

The interior parts were primed in Vallejo 73600 White. The primer must be applied in several layers in order to keep the fine surface detail. Once well dry it's rock hard and extremely smooth. The primer was applied in the subassemblies in order to reach the most hidden places.

The interior is filled with several details from the spare parts box. This will add that touch of accuracy and use to the vehicle.

Soon the model is ready for the painting process, but first we must protect all the interior parts and painting. For this task, one of the best approaches is using a smooth sponge to fill the interior. Sponge is smooth and will not damage the interior parts or painting.



Once all the filling complete, all we have to do is to seal everything with MIG Productions Liquid Mask. This ultra-thin liquid mask will reach all the small spots and close all of them. It takes only a few minutes to dry. and soon all the interior is entirely sealed.

Zenith Painting

As usual, I like to paint my models in the Zenith Painting Technique. This is a completely different and much more accurate technique when compared with the modulation style.

In the Zenith Painting Technique, the colours must be airbrushed in well thinned and consecutive layers.

In these pictures we can clearly see how the Zenith Technique looks much more real and accurate when compared with the modulation style. With the Zenith Technique we do not see aggressive colour contrasts and panels painted in several different colours.

With this technique the model is exposed to the light and the paint is applied in the same fashion as if the model was exposed under a spot light. The colour transitions are ultra-smooth and the model has a higher visual interest.



Once the green was dry, the handwritings and white stars were hand painted accordingly the only available picture. For this task, was used Vallejo Acrylics Model Colour white, heavily thinned in water.



The weathering started with a well thinned layer of MIG Productions oil colour Buff. As usual, thinned in MIG Productions Odourless Turpentine.



The weathering proceeds with a layer of well thinned MIG Productions oil colours, wash Brown and Shadow Brown. Both colours were applied well thinned and around some of the recessed parts.



MIG Productions Dark Wash, Earth Wash and Wood Ageing Solution were applied with the help of a very fine brush. For the best results and a better control, the wash can be thinned in MIG Productions Thinner for Washes.



MIG Productions Decay Wash was also applied over the green parts in order to achieve light colour variations and add that extra touch of realism to our model.



Several MIG Production pigment colours were mixed in MIG Productions Wet Effects and Damp Earth Mixture. Then they were gently sprinkled over the model, with the help of a medium size flat brush from the MIG Productions range. This process demands some care and it's always a better idea to get some practice in an old model or in some scrap parts.



Base and Diorama

I'm a diorama builder and the first step is making some simple composition. For a better dynamic setting, the elements must be placed in a dynamic way and according invisible diagonal lines. We must avoid at all cost placing elements parallel to the sides of the base. In this case, I'm using a round base and the "parallel" aspect is not so evident.

Even so, we must take some care when it comes the composition.

The small hill is made from heat isolation foam. This foam is cheap, easy to find and easy to work. Also is lightweight and ideal to fill big volumes.





The foam was glued to the wood base with the help of Deluxe Materials Tacky Glue.



Several layers of Deluxe Materials Foam Armour were applied in order to give an extra strength to the foam. Once well dry, it's really hard and will protect the underlay foam. During the base construction we must keep doing some planning and adjusting the element's final position.



For the soil, MIG Productions MUD P502 Europe Wet Mud Fine Texture was applied in several layers. Once well dry, it will look really nice and with a very convincing wet look. The final texture is really fine and scale spot on.



For the tree main body a dry cabbage root was used.



Several small holes need to be drilled in order to receive the small branches and further foliage.



Joefix from Belgium offers a wide range of solutions for dioramas and their Seafoam stuff is just ideal for what I'm looking for.



All we have to do is glue, with the help of Deluxe Materials Rocket Hot glue, the small branches in the holes opened previously.



Soon, the tree will have the desired volume and is ready to receive the foliage. For the foliage I usually use about 3 different leaves colours. They are from several brands and very easy to find in the railway modelling companies.



Instead of glue I prefer to use hair spray. The glue properties are almost the same and strong enough to keep all the leaves in place. Also, it dries very fast, ads a great patina to the tree and if we are not happy with the final result, all we have to do is deep the tree in water, remove the foliage and repeat the process.



Once the tree was in place, the bottom part received a thinned layer of MIG Productions oil colour Field Grey and MIG Productions pigment Faded Green, thinned in MIG Productions Odourless Turpentine. This will represent the moss around the tree and will add that touch of realism to the scene.



Dry foliage from Treemendus was added to the base.



Model Scene provides some cool laser cut leaves and once in place they look absolutely stunning.



Most of the ground foliage is from MiniNatur and Model Scene. Both companies provide very interesting and accurate vegetation. When combined, the results are very, very realistic and natural.



The soil muddy look was achieved combining MIG Productions Acrylic Resin with several MIG Productions. The final result is very convincing and natural.



For the soil colour variation, several layers of MIG Productions Mud Splash Wash was applied.



The final step is applying several layers of MIG Productions Wet Effects and Damp Earth Mixture.

Figures





All the figures for the project came from MiniArt. The detail is really nice and only some minor flash need to be gently removed.

Before painting, a composition study must be done. At this stage, the direction of the heads must also be defined. The MiniArt heads and face expressions are ok; even so, I decided to replace them by resin items from Hornet Models. The detail and face expressions are more suitable for the scene I'm trying to achieve.

to my dioramas.
Besides the human factor and scale, they can also tell a story...,









Conclusion

This was a very cool project and the opportunity to add another diorama to my portfolio.

The BA-64 from MiniArt is a more than recommended kit. The quality is outstanding and the possibilities are huge.

Hope you like it. Be safe! ■

Modelspec

MiniArt 1:35 BA-64

Kit No. 35110

Materials and Paints Used:

- Deluxe Materials glue and special effects solutions
- Heat isolation foam
- Wood base
- Injected plastic
- Resin parts
- Plastic card
- Metal parts
- Vallejo primers, acrylics and thinners
- MIG Productions oils, washes, pigments, filters and thinners
- · Graphite soft pencil

References:

Several Internet sites and forums

- ✓ Unusual subject and good opportunity to build a different BA-64.
- X Nothing worth mentioning.

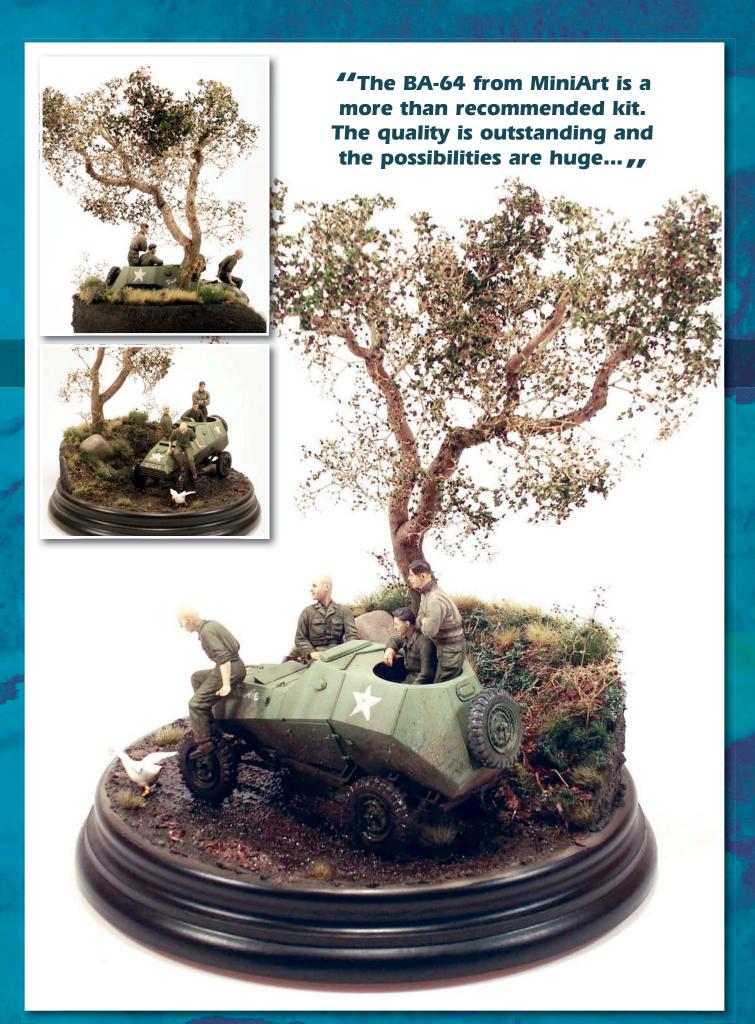
Available from

MiniArt Kits are available from Creative Models Limited www.creativemodels.co.uk

Rating •••••••







A POSTCARD FR

Brett Green visits the 2016 Shizuoka Hobby Show and examines some of the new and forthcoming releases.

he first impression when stepping off the plane at Tokyo Narita airport is that of quiet. People are here, but the terminal is almost silent and even footfalls are dampened by the short pile carpet.

Customs are quickly and politely dispatched, then on to the baggage carousel and a walk to the NEX Tokyo Express airport train.

The night is cool and drizzly as we speed toward Shinagawa Station. The calm is finally broken by the homeward bound commuters on the busy city platform, and I strike up the steep hill to my hotel for the night.

But this is only a brief punctuation in my journey. Next morning, more travel, this time the duck-billed Shinkansen "bullet train" to the seaside city of Shizuoka, the undisputed hobby capital of Japan.

On a clear day you have a good view of the majestic Mount Fuji from Shizuoka, but the clouds did not scatter until the first day of the Shizuoka Hobby Show on Thursday.

I gathered with the large crowd at the glass doors, waiting for the 9:30 am opening time. There was no brass band this time, but no less excitement. The besuited throng outside applauded as the doors opened.

Inside, exhibitors formed a guard of honour on each side of the doors to applaud the trade visitors as they streamed in - quite a reception!

The number of visitors is relatively modest on these first two Trade Days, so I had a good opportunity to peruse the new and forthcoming releases on display. Here are some brief notes on the military models:

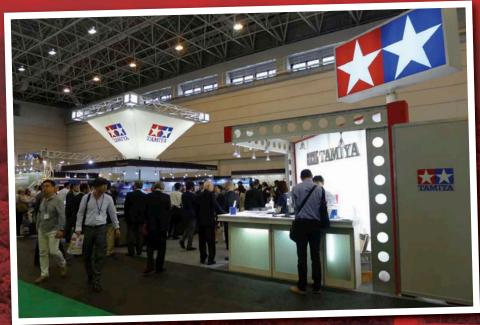
TAMIYA

Tamiya officially announced their all-new 1:35 scale M10 Tank Destroyer. The model represents the mid-production version and features full length flexible tracks and a very nice three-figure crew set in the act of firing the main gun.

Tamiya also launched their new 1:48 scale Japan Ground Self Defence Force Type 10 Tank. This looks great, with authentic non-slip texture, link-and-length tracks and a Commander figure.

Also on hand was the forthcoming 1:16 scale Jagdpanzer IV/70(V) Lang. The model includes schurzen, individual link tracks, optional decal Zimmerit and may be fitted with full radio control. The R/C system not only drives and steers the vehicle, but also allows the main gun and machine gun to fire.

Another Italeri co-operation was also on the Tamiya stand – the German Field Maintenance Team and Equipment Set. Tamiya figures and new parts have been added to the original Italeri equipment.



Tamiya's big stand in the trade hall.



Focus of attention was very much the forthcoming 1:48 scale F-14A Tomcat.

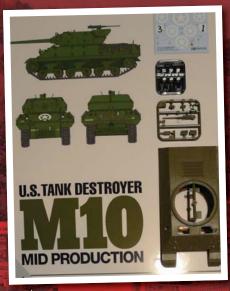
ROM SHIZUOKA



This was a large and very popular stand displaying full-sized and full-weight firearms from pitols through to sub machine guns and assault rifles.

 Raymond Chung from Kinetic Models / Lucky Model (left) with the Editor.





Tamiya's big military announcement at the show was their all-new 1:35 scale M10 Tank Destroyer.



Tamiya's Japanese Type 10 in 1:48 scale joins the existing 1:35 and 1:16 scale kits.



The kit comes with three crew figures.



Speaking of big — Tamiya's 1:16 scale Jagdpanzer IV/70(V) Lang.

The one-piece upper hull of the big Lang kit.



ASUKA MODELS

Asuka Models, previously known as Tasca, had their forthcoming 1:35 scale JGSDF Type 74 tank. I believe this will be their first foray into post-WWII subjects.

REVOSYS

Revosys is a new name to me. This new Chinese company had a 1:35 scale VK3601 on display with detailed interior. This looked very impressive.

DRAGON

Dragon was on hand with a large selection of new and forthcoming releases including their 1:35 scale M48A1, Magach 1 & 2, Black Label MIM-104F Patriot system, SU-76i, M60A2 Starship and more.

FINE MOLDS

Fine Molds does not release a lot of kits but when they do, they're worth taking notice of. Continuing the theme of new modern Japanese vehicles, Fine Molds had their forthcoming 1:35 scale Type 61 on the stand.

AFV CLUB

AFV Club had a number of new releases on hand including their 1:35 M41 Walker Bulldog, but the most intriguing was a partial test shot of an all-new 1:35 scale M113 ACAV. Looking forward to seeing this one - it's about time we had a state-of-theart bucket!

HOBBY BOSS

The Hobby Boss stand was full of recent and forthcoming releases including the intriguing Austrian ADGZ8 Armoured Car.

MINIART

MiniArt's prolific release schedule continues with announcements of an Su-85, Su-122, railway tracks and various figure sets.

PUBLIC DAYS

While the first two days are reserved for the hobby trade, the weekend belongs to the modellers.

This is the third time that I have attended the Shizuoka Hobby Show but I was no less overwhelmed by the crowds and the sheer number and quality of the displays.

Even before entering the halls, the JGSDF had a number of their vehicles on display with soldiers and officers chatting to the public. They were even selling current Japanese uniform items!

First port of call was the Flea Market, which has moved to a larger location due to its popularity. There was a fascinating combination of rare and second hand kits, and local cottage industry manufacturers plying their trade.

Next up was the model display area - a packed conga line of humanity trying to glimpse the fantastic models on display.

This year there seemed to be a significant proportion of Gundam and fantasy figures on the tables, but the traditional aircraft and military modellers still had plenty to show and see.

Finally, the public was let loose in the trade hall. Judging by the numbers there, they were very interested in the new releases!



The German Field Maintenance Team and Equipment Set features Italeri and new Tamiya parts.



Asuka's forthcoming 1:35 scale JGSDF Type 74 tank.



Accessories were on hand too. Here is Fox Models' 1:35 Type 10 Tank Dozer set.



The forthcoming Hobby Boss 1:35 scale
Austrian ADGZ8 Armoured Car.



MiniArt's all new SU-122 in 1:35 scale.



Beauty is more than skin deep — full interior for MiniArt's new SUs.



The new Revosys 1:35 scale VK3601, also with a detailed interior.



Zvezda will be releasing a new 1:35 scale T-35 land battleship!



Seen on the AFV Club stand.



Also from AFV Club, a 1:35 scale late version M60A2 Patton.



Amusing Hobby's 1:35 scale FV 214 Conqueror.



NEW SPR北方で PRIZE 1/20 プラカタックをアルマン PRIZE 1/20 TO A プラカタックをアルマン

NEV DFR表示定 1932 UM 77349997477 1932 UM T7349987477

Dragon's 1:35 scale Magach 1/2. -

Panzer IV 8.8 cm Flak 36 in 1:35 scale from Dragon.



A display of JGSDF vehicles greeted visitors as they entered the Twin Messe site.



Uniforms for sale.



The popular Flea Market. This is the second hand section.



Cottage industry companies were on hand too. Here is DEF Model.



Three gentlemen from LifeLike Decals,



What a difference a day makes!



"Team Europe" was on hand with display models and demos.



A nicely restored Kubelwagen.



Between the halls, there was another display of full-sized military vehicles. Here is a Kfz.15 Horch.



The crowds outside.





Al Bowie examines the latest Asuka Sherman, this time with bonus resin parts from Value Gear.

HYBRID COMPOSITE

he Sherman was one of the most numerous AFVs ever produced and was the backbone of the Western Allied armour formations. One of the most numerous variants was the M4 which was a radial powered welded hull variant. It was the first variant designated for production and served mainly with the US Army on all fronts.

Like most Sherman variants. it was improved and modified during its production run and this kit represents the so called composite or hybrid hulled variant. This was an attempt to rectify a failing of the early 56 degree glacis Sherman variants by replacing the glacis with a casting similar to the one used on the cast hulled M4A1, which was believed to offer better ballistic protection than the welded plate glacis of the earlier models whilst not requiring the rarer large casting facilities needed to produce the large hull casting of the M4A1. This version commenced production in 1943 initially with small driver's hatches like the M4A1 (the first 50) and were issued in large numbers to US and British Forces serving in Italy (UK), North West Europe (UK & US) and the Pacific (US).

The kit is not entirely new and is based on the earlier TASCA/ASUKA Firefly Mk.Ic Hybrid (35-028) with the addition of a new 75mm turret frequently referred

to as the Mid-Production Low Bustle Turret. This featured a cast-in thickened cheek in front of the gunner and no pistol port or loaders hatch (D 50878). In fact, like its namesake, this model is really a composite with the turret sprues from ASUKA kit 35-032 M4 Sherman and the hull and running gear from the earlier Tasca/Asuka Mk.lc Firefly.

The kit has M4 VVSS suspension with the later upswept return roller support arm using parts from earlier Tasca/Asuka Shermans (Sprue B). Road wheels supplied are the pressed steel and spoked examples with the track type being T 48 Rubber Chevron frequently seen on Chrysler supplied vehicles.

The hybrid hull is well done however the cast markings on the shoulder are very indistinct and underdone (unreadable) and the large weld between the cast glacis and the Hull sides is absent. The complex shape of the glacis matches my examination of the real thing however Tasca/Asuka have omitted the small humps cast in the centre of the glacis which is a major ID feature on the real tank. Other than that, the hull is very detailed and complete with photo-etch provided for the grouser vent covers, the radiator cover and a number of other features such as periscope guards and the air outlet screen under the rear overhang.

The fit of this
kit, like all Tasca/
Asuka Sherman's
is outstanding and
construction is
straightforward
causing no problems.
The first release
comes with a
bonus in the form
of a set of resin
stowage from Value
Gear which is a
very useable and

well sculpted set typical of US Sherman stowage. One figure is included representing a US tanker in coveralls and fibre tank crewman's helmet. This is the same commander figure seen in the earlier M4A1 kits by this manufacturer. The excellent M2 .50 cal, which is a small kit in its own right, is included offering the smaller early war ammo box or later 100 round boxes more commonly seen on this variant.

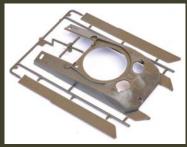
Here we come to the disappointing part of this kit and that is the markings that are provided for just a single US vehicle, "China Clipper" of the 68th TB of 6AD, which served in France 1944. Markings appear to match known photos. It would have been nice to see a few marking options given including the British ones of 33 Armd Bde which had colourful turret numbers or some of the US TB's from the Pacific which had a number of colourful markings with artwork. This is the second ASUKA Sherman release and that kit (M4 Sherman) also only had one marking option, which was disappointing given the older Tasca releases had at least 4 options per kit.

In summary, this is a very welcome release and certainly an improvement on Dragon's failed attempt at the M4 Composite. Is it perfect? No, but the addition of the Value Gear resin stowage set is welcome and I still think this is a great value kit.

Unlike its competitor that has fit and detail problems (including an unusable turret for a composite), the instructions are spot on and easy to follow - you won't put British antennas on this one as you would if you followed DML's instructions!

Recommended.

Sample purchased by reviewer



The composite hull.



Cast texture on the nose of the hull.



The new turret with the cast-in thickened cheek.



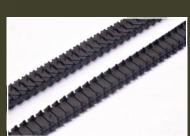
Bogies with the upswept roller mounts are used for



...but the straight versions are on the



The kit's photo-etched parts.



Full-length T48 rubber chevron tracks.



Value Gear resin stowage is included in this boxing.



Markings are supplied for a single vehicle – China Clipper.

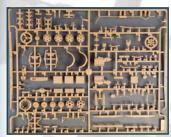


Revell has added new decals and instructions to the excellent ICM 1:35 scale Opel Blitz kit. Graham Tetley takes a look.

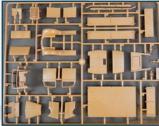
BLITZ RESOXED



Instructions.



Engine and suspension sprue.



Cab and body sprue.



Door handles, window winders and windscreen winers.

pel Blitz (German for "lightning") was the name given to various German light and middle-weight truck series built by the German Opel automobile manufacturer between 1930 and 1975. The original logo for this truck, two stripes arranged loosely like a lightning symbol in the form of a horizontally stretched letter "Z", still appears in the current Opel logo.

From 1939, the reliable Blitz
3.6 three-ton version was used
in large numbers by the German
Wehrmacht armed forces
throughout World War II. Derived
variants included an elongated
version and the four-wheel drive
Blitz A. To cope with the bad road
conditions and the rasputitsa mud
seasons on the Eastern Front,
a half-tracked Maultier (mule)
Sd.Kfz. 3 version was built using
tracks and suspension based on
the Universal Carrier.*

In this new release, Revell has re-boxed ICM's excellent 1:35 scale Opel Blitz truck that was initially released about three years ago now as ICM's Item No. 35401.

This version gives us new decals and new instructions but the plastic is the same. There are 170 parts in the box split between 2 tan-coloured sprues, a clear sprue for the windows and a soft rubber one for the road wheels. Detail throughout is good to superb with just a little flash and some ejector pin marks in visible places.

CONSTRUCTION

As with most ICM kits, we start off with a nicely detailed engine that may be displayed by leaving the bonnet parts open. The chassis comes as separate parts so I recommend the use of steel

ruler and right-angle to get it all straight and level. A highlight for me is the radiator, Part A70, which is superbly detailed.

Moving on to the axles, the tyres are moulded in soft rubber that gives us a very credible tread pattern but there is some 'flash' on the sidewalls that will be a bear to remove. Also, there are some very hard-to-remove mould separation lines and I for one always prefer to see these tyres moulded as individual plastic 'slices'. Assuming that your chassis is straight and true, the axles and drive shaft will all fit perfectly.

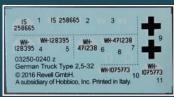
The cab has all of the driver's controls replicated in detail. A low point of this kit for me is that Revell does not provide decals for the instrument panel dials whereas ICM does. The cab doors are separate parts so just take care aligning the cab panels and roof.

Turning to the cargo bed, this has all of the clasps and catches moulded integrally as well as a lovely wood grain texture moulded in. If you wanted to display it with the sides down, be prepared for a little scratch building.

CONCLUSION

The basic truck is a lovely little kit that builds nicely out of the box. It comes with a Revell Skill Level of 5 (their highest) and I would concur due to the multitude of small parts and general construction. There is no etch provided but it looks lovely just as it comes. It gets an 8.5/10 and a thumbs up from me.

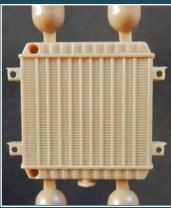
Revell model kits are available from all good toy and model retailers. For details visit www.revell.de/en



Decal options



One tidy bag of parts



Wow! Just wow



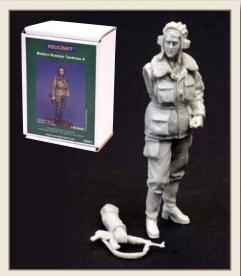
I wonder if this is licensed?



Tyre tread



Clear parts.



NEUCRAFT MODELS

MODERN RUSSIAN TANKMAN A 1:35 SCALE **ITEM NO. 35001**

Neucraft Models is a new company that offers figures and vehicles in various scales for wargamers and military modellers.

The first foray into 1:35 scale figure modelling from Neucraft is a Modern Russian Tankman.

The figure is well sculpted in a natural, casual pose, with impressive fabric rendition and drape plus a convincing fur collar. He is carrying an AK-47 Assault Rifle and is wearing a Soviet style tanker's helmet. The face is really well rendered too.

This is an impressive first effort from Neucraft, and the relaxed pose and abundance of modern Soviet vehicle models makes him versatile too. The tankman could be standing beside a vehicle, on top of a turret, or placed on a small base as a standalone display piece.

Highly Recommended. Available online from Neucraft Models www.neucraftmodels.com

Brett Green



MANTIS MINIATURES

1:35 SCALE

ITEM NO. 35005 - ANIMALS SET 1 **ITEM NO. 35071 - ANIMALS SET 18** ITEM NO. 35076 - ANIMALS SET 20

In addition to WWI and WWII figures, Mantis Miniatures offers a wide range of animal figure sets. These three sets provide a selection of jungle and forest animals, plus a set dedicated to bats - flying and hanging - and a sealife set.

All are cast perfectly in grey resin and although they are labelled as 1:35 scale, I'm sure you could get away with using them in somewhat smaller or larger scales.

These animals should provide inspiration for some unique vignette and diorama ideas! Highly Recommended.

Mantis Miniatures products are available online from their website www.mantisminiatures.pl/EN/ **Brett Green**





QING YI MINIATURES

WWII SOVIET FIGHTER PILOT 1:32 SCALE **ITEM NO. QY32006**

Qing Yi Miniatures from China has a range of 1:32 scale (54 mm) military figures, to which they have recently added a WWII Soviet Fighter Pilot. The figure is ambitiously - and totally successfully - cast in a single piece of resin and packed very securely in foam inside a shiny metal box.

From his boots, heavy greatcoat and gloves, this figure very effectively evokes the harsh winter conditions encountered by Soviet pilots. The parachute is also cast in place. Sculpting is excellent everywhere. The sculptor has even added recessed stitches in the parachute straps. The rugged facial features and deep folds of the greatcoat add to the character.

Although this figure would most logically be suited to accompany a 1:32 scale Soviet aircraft model, the quality of the sculpting and casting would justify him as a project all on his own. I hope that we will see more pilot figures from Qing Yi Miniatures.

Highly Recommended.

Qing Yi Miniatures are available exclusively from Neucraft Models www.neucraftmodels.com **Brett Green**



MANTIS MINIATURES

1:35 SCALE ITEM NO. MACO2 - ACCESSORIES FOR US WWII MOTORCYCLE WLA ITEM NO. 35058 - U.S. SOLDIER AND RIDER

Mantis Miniatures from Poland has a growing range of high quality 1:35 and 1:72 scale figures and accessories.

The have released two related sets to suit MiniArt's 1:35 scale Harley Davidson WLA motorcycle.

The first is an accessory set with six parts cast perfectly in grey resin. The parts comprise a wet-weather front cover for the bike, saddlebags for both sides, general stowage for the rear passenger seat and a choice of either a stowed .30 cal rifle or Thompson Gun. These will lend some individuality to your MiniArt motorcycle. The second set is two cast resin figures – a 1:35 scale rider and a soldier to accompany MiniArt's WLA. The rider is wearing wet weather gear and is cast with two separate arms.

The standing soldier features separate arms, head with helmet cast in place and a Thompson Gun. Both figures are perfectly cast, featuring a high level of crisp detail.

Combining MiniArt's 1:35 scale WLA with this accessory set and the two figures will deliver a compact, evocative scene. Highly Recommended.

Mantis Miniatures products are available online from their website

www.mantisminiatures.pl/EN/

Brett Green



ITALERI 1:9 SCALE TRIUMPH 3HW • KIT NO. 7402



have heard it said that we are currently living through a golden age of modelling. However, some of us were around in the 1970s and can remember the golden times then, before the Great Slump of the 1980s. Who else today is making a 1:9 Kettenkrad, a 1:24 King Tiger with full interior or individual diorama sets that combine to give a huge battlefield scene?

ESCI was a huge player in the mid-1970s model market and released, amongst other things, a series of 1:9 scale kits of which this Triumph was one. Italeri acquired the moulds some time ago and occasionally re-release these kits and now we have the opportunity to see it again. It has lost none of its charm.

Upon opening the box we are greeted with three sprues of plastic parts, one clear, two vinyl tyres, one vinyl sprue containing the seat, drive chain and various straps, some hose for the plumbing and metal springs for the seat, bike stand & front suspension. A set of well-printed decals giving us markings for four vehicles – three military and one civilian - are also included. Moulding quality is clean & crisp with just a hint of flash here and there with most knock-out marks hidden. Construction starts with the engine and then moves on to the frame. Concerning this, there are some large and positive location points but care will still be needed to get it straight. One potential problem is that the rear mudguard comes in two parts and the join is not positive at all. Some filling & sanding will be needed here as any join lines will be visible. The wheel rims are nicely detailed although cleaning the moulding lines from each spoke will be a nightmare. The tyres have a lovely tread pattern moulded in and the mould seam is actually not too apparent, so once the moulding plug is removed they are very respectable. Construction progresses through the fuel tank and addition of many other parts. All of the wiring & plumbing is very nicely represented and we even get some small, individual, hex bolts to use here

and there. **1970S CHIC**

Here is where we get to some of those lovely little gimmicks that the 1970s were famous for. Except

flares, Disco music and smoking on aircraft... First up is the drive chain as this soft vinyl part is located between two toothed cogs on the rear wheel & drive assembly which you can make moveable if you wish. The second are the little springs for the seat (bouncy!) and another spring for the front fork (bouncy bouncy!) Turning to the vinyl parts, when we get to the saddlebags Italeri give us all of the straps in this

material. Detail is good and you attach these parts by our other friend from the 1970s, Mr Heated Screwdriver, Heating a screwdriver over a candle flame brings back so many memories and would have Health & Safety zealots in fits these days. To round the kit off, we get a Sten gun and helmet, both of which are well detailed and come with vinyl straps. The helmet has a vinyl neck quard that you slip into the outer shell before adding the inner liner and whilst detail on it is good, it is marred by ejector pin marks that are hard to remove in this material.

INSTRUCTIONS

The instructions come in an A4 booklet and are very clearly drawn and easy to follow. There are 20 construction steps in all – some with individual subsections – but it is uncluttered. There are two areas of confusion that I noticed though, which are: a) It took me a few minutes of scanning to find where the four springs go, but they are there. b) The vinyl tubing has to be cut into lengths but these dimensions, and location, are scattered throughout the construction steps. Take your time and study the drawings as it will all become clear. Unusually there are no part numbers on the sprues themselves so you have to refer back to the sprue layout drawings in the front of the instructions.

CONCLUSION

Although the model in now 40 years old, it still stands tall. Someone with basic skills will be able to tackle this due to its size and clear instructions but it is suitable for all. It is good to see it back and it scores a solid 9/10 from me.

Thanks to The Hobby Company for the sample www.hobbyco.net



Vinvl sprue



Close up of the engine parts







Fancy a Sten Gun in large scale?



Close-up of the handlebars





Tyre tread detail

Tyre sidewall detail.



The spokes of doom!





1:48 Scale - A round-up of the latest news and releases

BUILDING BY NATURE

e all have our own certain building and painting styles and these are usually dictated by outside influences. A big statement you might say? Well, let me firstly explain the way I build. When I open a kit, I review its contents, looking for ways to improve the kit. One of my pet hates is out of scale parts. Take for example the Tamiya's 1:48 scale Panzer IV. As soon as I opened that kit I knew that I would have to replace the schurzen with either plastic card or brass replacements. This seemingly obligatory use of brass updates by everyone that wrote articles changed my building style.

Before I wrote articles, I used to glue all the aftermarket stuff on and paint. I paid little or no attention to the way it looked on the model. I noticed that all the articles I had been reading had the photoetch attached in an almost photo-perfect fashion. I asked a respected author of armour articles on how - and more importantly why - he did it that way and his reply was somewhat surprising. I was expecting a long winded retort explaining the various benefits of his approach and the technical reasons when he did it. What he told me was, it just looks better in the photos. He also went on to say that it takes so much longer to attach it in a photo perfect fashion.

So there you have it - all the photos you see in article's with neatly and perfectly placed photo etch is purely for the benefit of a photo.

Did this change my building style? Sure it did. I do it slavishly now, only to have it covered by primer and paint at a later stage of the build.

Speaking of painting, most of you that have read my articles will be no doubt be aware that is some cases I re-paint my models a number of times before the build is finished. I do this for a number of reasons. I like to fool myself in thinking that I have exacting standards but in reality, I always seem to neglect to prepare the model for painting or forget how to use my airbrush effectively. This has had an effect on my builds. I now tend to break my builds down in to

achievable targets. I usually sub-assemble most of the main components and paint them separately. I do this for a number of reasons. The first, is time (which I don't seem to have a lot of) and secondly I always seem to mess up the painting process in some way or another so it's easier to strip the paint if there in smaller subassemblies, but that's just our secret so don't tell anyone, okay? So don't be all that fussed if your attachment of photo-etch is not picture perfect, it really doesn't matter. What does matter is the finished product.

Until Next Time Luke Pitt





When Tamiya released their 1:48 scale Dingo, I quickly went out and purchased one. The first thing that struck me was the wheels. They seemed to be the right shape but the tread pattern on the tyre itself was faint. Try as I may, coming up with a solution proved fruitless.

I have not built the kit for that very reason - the lack of a suitable tyre. All this has now changed with the introduction of this new wheel set from DEF Model. Cast as one piece each, the wheels feature crisp hub details and the unique English directional tread pattern on the tyres themselves. The sidewalls even have the manufacturer's logos on them.

As with all DEF wheels, they exhibit a subtle yet effective flat spot on the bottom of the wheel itself. A set of wheel paint masks are also included. Make no mistake, if you only buy one update for the Tamiya kit get this one. Not only will they have a dramatic effect on the overall appearance of the kit, they will make it far more accurate.

Highly Recommended.

Thanks to DEF Model for the sample www.defmodel.com Luke Pitt



I must confess, I have tried to scratch build these tyres in the past but

Thanks to Tank Workshop for the sample www.tankworkshop.com

I highly recommend this set for anyone attempting a build of the various

fond the job next to impossible.

Highly Recommended.

Luke Pitt

1:48 scale resin Dodges now on the market.

FIGURES WITH ATTITUDE

1:48 SCALE SITTING GERMAN TANK CREW **FEMALE HEADS**

I'll say this upfront, this batch of resin figures is probably the best overall figures in 1:48 scale that I have reviewed thus far. Bold words you may say, but in reality these are every bit as detailed as a 120mm figures but in 1:48 scale. The casting is flawless and each figure comes complete with two different heads. The head sculpts are next to perfect and show great finesse in both detail and charter.

The uniform details are handled incredibly well as are the fabric creases and indeed the casual posing of the figures themselves. If you buy one set of 1:48 scale figures this year you should buy these, you will be simply amazed at the detail the exhibit.

The female heads consist of just four resin parts and with the application of hair they should indeed look the part as they have soft female features. With adaption these could equally work in for either young men of either the Asian or African origins. Highly Recommended.

Our thanks go out to Figures with Attitude for providing the review samples; they can be contacted on face book on the following IP address: https://www. facebook.com/FiguresWithAttitude48/ Luke Pitt











CORSAR REX 1:48 SCALE **GERMAN SOLDIER ITEM NO. CR-48023**

It seems to be 1:48 scale figure review month! Corsar Rex in my opinion is one of the premium 1:48 scale figure producers today. All of their figures are quite simply superb. This latest rendition is no



The figure consists of 12 very well cast pieces and although presented on the tall side in terms of size a bulk the figure is very usable. The figure is outfitted in a reversible winter smock and the detail on it is very well done.

I particularly like that the helmet has been cast as a separate piece as this will aid painting of the face itself. This is an outstanding piece and well worth the asking price.

Highly Recommended. Thanks to Corsar Rex for the sample http://corsarrex.com Luke Pitt





TORO MODEL 1:48 SCALE

ITEM NO. 48F34 -**POLISH MARINE** ITEM NO. 48F32 -**POLISH INFANTRY OFFICER**

You have to hand it to Toro Model. They always seem to come up with choices that the others just don't seem to think of. These two new figures are just such examples.

The thing that strikes me about Toro Model's 1:48 scale figures is the complete nature of the product. With these, each includes a small colour leaflet that gives a little history on the subject and either a colour painting or photograph of the uniform depicted, almost all with a decal sheet.

The two figures are very well cast with crisp uniform details present. The all-important facial detail is rendered to a very high standard. The posing is good as they may be adapted to almost any situation. You really can't go wrong with these figures, they are very aood.

Highly Recommended. Thanks to Toro Model for the samples

http://toro-model.home.pl Luke Pitt

BUYERS GUIDE>>>>>>>

AVID READER

Tel: 01299 823 330 Fax:01299 829 970

Unit 10, Hodfar Road, Sandy lane Ind Estate, Stourport On Severn, Worcestershire, DY13 9QB

MILITARY, AVIATION, NAVAL, MODELLING, RAILWAYS, CAR & MOTORCYCLE BOOKS

9.30 - 4.30 MONDAY TO FRIDAY BY APPOINTMENT ONLY

WWW.BOOKWORLDWS.CO.UK

INFO@BOOKWORLDWS.CO.UK VISA/MASTERCARD/MAESTRO

PARABELLUM

Tel: 0121 551 8878 Fax: 0121 707 1471

54 Vyse Street, Hockley, Birmingham, BI8 6HR

11.00AM TO 5.30PM THURSDAY, FRIDAY & SATURDAY

SPECIALISING IN AIRCRAFT, ARMOUR, VEHICLES & FIGURES IN 1/72, 1/48 & 1/35, VALLEJO PAINTS, MAIL ORDER 1/48 website: www.parabellum.co.uk email: sales@parabellum.co.uk

MASTERCARD/VISA

MODELS FOR SALE modelsforsale.com

PLASTIC MODEL KITS, NEW, SECOND-HAND, AND DISCONTINUED. BOOKS AND ACCESSORIES.

TEL: 01933 622654 SALES@MODELSFORSALE.COM UNIT 3 DEAN CLOSE - RAUNDS - NORTHANTS NN9 6BD

HANNANTS MODEL SHOP

Tel: 0208 205 6697 Fax: 01502 500521 Unit 2, Hurricane Trading Estate, Grahame Park Way, Colindale, NW9 5QW

OPEN 10.00AM - 5.30PM, THURS & FRI OPEN UNTIL 7.00PM

NO1 IN EUROPE FOR PLASTIC KITS AND ACCESSORIES INCLUDING THE FULL RANGE OF TAMIYA (NOT RC)

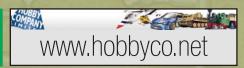
email: sales@hannants.co.uk www.hannants.co.uk 1/2 MILE FROM RAF MUSEUM **MASTERCARD/VISA/SWITCH**

ADVERTISE ON THIS PAGE!

IF YOU ARE READING THIS THEN SO ARE THOUSANDS OF OTHERS. FOR INFORMATION, **CALL SEAN** ON 01525 306201



eduard.com





italeri.com

creativemodels.co.uk



tamiya.com



adhbooks.com







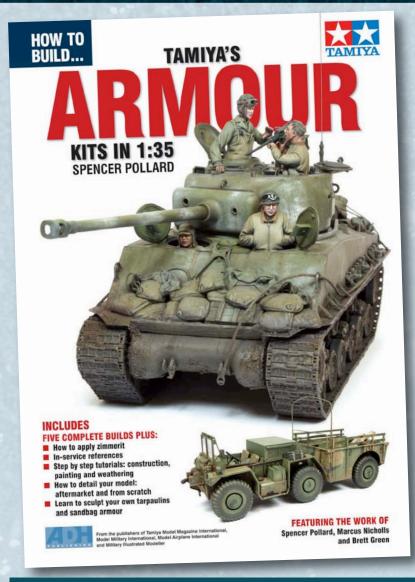


missing-lynx.com www.missing-lynx.com



www.hyperscale.com

Available in the 'HOW TO BUILD...' series



HOW TO BUILD... TAMIYA'S ARMOUR KITS IN 1:35

Though the modelling world is awash with an incredible variety of military vehicle kits from a huge number of different companies, one stands head and shoulders above the others in terms of originality, buildability and fun. That company is Tamiya, who have consistently provided the budding enthusiast with some of the finest kits available in the scale of 1:35.

This new book brings together five detailed features that will show what is possible from this extensive range of kits. In so doing, it offers hints and tips, detailed step-by-step guides and written descriptions on all manner of techniques from basic construction, through detailing, painting and realistic weathering. No stone is left unturned in the quest to inspire the modeller to complete similar projects for themselves. It really is a one-stop-shop for the budding military modeller!

Within its 84 pages you will five find features that take you through the construction and painting of the 'Easy Eight' Sherman, Nashorn, Elefant, Gama Goat and Tiran 5, all expertly put together by our renowned team of authors, Spencer Pollard, Brett Green and Marcus Nicholls, who have created one of the finest collections of modelling features ever published, on this famous range of kits.

This then is the world of Tamiya's wonderful 1:35 military vehicle kits - we hope that you enjoy your visit!

ALSO AVAILABLE Visit adhbooks.com for details

























P\$P: UK; £2.00 Europe; £4.00





PLACE YOUR ORDER NOW ON TEL: 01525 222573 FAX: 01525 222574

Tamiya's Armour Kits in 1:35 book

HOW TO BUILD... ARMOUR

Name Address Post/zip code Country

Please debit my credit/debit card for £
Visa 🗌 Mastercard 🗎 Maestro 🗀 other
Card No
Expiry dateStart date
Security Number (last 3 digits on signature strip)
Issue No (if applicable)

c	theques payable to: ADH Publishing Ltd.
Sic	gnature
_	ite

Please mail this form to;
ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX, United Kingdom Tel; +44(0)1525 222573 Fax; +44(0)1525 222574 Online; www.adhbooks.com (Photocopies of this form are acceptable)



i Contact Details - for companies featured in MMI...

ACCURATE ARMOUR/ ARMOUR DISTRIBUTION

Units I5-I6 Kingston Industrial Estate, Port Glasgow, Inverciyde, PAI4 5DG Scotland. Tel; 01475 743 955 Fax; 01475 743746 www.accurate-armour.com

ADALBERTUS

Iberyjska 7/49, 02-764, Warsaw, Poland adalbertus@adalbertus.com.pl www.adalbertus.com.pl

THE AIRBRUSH COMPANY Ltd

Unit 7 Marlborough Road, Lancing Business Park, Lancing, West Sussex, BNI5 8UF. Tel; 08700 660 445 www.airhrushes.com

ALCLAD II LACQUER

5 St Georges Close, Bacton, Norfolk. NRI2 OLL Tel; 01962 65216 Fax: 01692 652334

ALPINE, ROYAL MODEL, ARTISAN MORI, YOSCI; SMARTMODELLING

No.7 Gordons Way, Oxted, Surrey RH8 OLN. UK Tel; 01883 734746

smartmodelling@smart7.fsworld.co.uk

AMPERSAND PUBLISHING

(via Historex Agents in UK) 235 NE 6th Avenue #4 Delray Beach, Florida 33483-5543, USA Tel: 561-266 9686

ARCHER

(Historex in UK)
PO Box 1277 Youngsville, NC 27596-1277, USA

BADGER AIR-BRUSH COMPANY

9128W Belmont Ave, Franklin Park, IL 60131 Tel; 847/678-3104 www.badgerairbrush.com email info@badgerairbrush.com (In the UK from www.shesto.co.uk)

BISON DECALS

Available from www.hannants.co.uk and

BLAST MODELS

Via AFV Modeller or www.blast-models.com

BOOKWORLD WHOLESALE

Unit 10 Hodfar Road, Sandy Lane Ind Est Stourport, Worcs, DYI3 9QB Tel: 01299 823330 info@hookworldws.co.uk

CALIBRE 35

Via Hannants in UK

CAMMETT

(Lifecolour, Scale Caliber)

Unit 5 Greenfield Industrial Estate Forest Road, Hay on Wye, Powys, HR3 5FA Tel: 01497 822757 Email; cammettco@btinternet.com

www.cammett.co.uk

CLASSIC PUBLICATIONS

Midland Counties Publications, 4 Watling Drive. Sketchley Lane Industrial Estate, Hinckley, Leics UK, LEIO IYF Tel; 01455 233 747, Fax: 01455 233 737 midlandbooks@compuserve.com www.classic-publications.com

CREATIVE MODELS LTD

(Mig Productions, Vallejo, Accurate Miniatures)
Unit 6-10, Honeysome Industrial Estate, Honeysome
Road, Chatteris, Cambridgeshire. PEI6 6TG Tel: 01354 760022 www.creativemodels.co.uk

info@creativemodels.co.uk

DARTMOOR MILITARY MODELS Haylis cottage, Budlake, Broadclyst Exeter, EX5 3LJ, England Tel: 01392 881271 w.dartmoormilitarymodels.com

DELUXE MATERIALS

www.deluxematerials.co.ul info@deluxematerials.com Tel: 01529 455 0340

DRAGON MODELS

(The Hobby Company in UK)
Dragon Models Ltd, Kong Nam Ind. Building BI-IOF,
603-609 Castle Peak Road, Tsuen Wan NT, Hong Kong Fax; (HK) 4110587 www.dragonmodelsltd.com (For I:6 Action Figures, please contact Amerang in UK)

ECHELON FINE DETAILS

Available from; www.accurate-armour.com & http://pachomel.pacific.net.sg/~kriegsketten/

FRIENDSHIP MODELS

12 Delta Drive, Musselburgh, East Lothian, EH2I 8HR Tel; 013I 665 0866 Mobile: 07877166225 www.friendshipmodels.com

GREAT NORTH ROADS

9a Marcombe Road, Torquay, South Devon, TQ2 6LL Tel; 01803 400436 www.greatnorthroads.co.uk email svfarrugia@yahoo.co.uk

HANNANTS

Harbour Road, Oulton Broad Lowestoft, Suffolk, NR32 2LZ, Tel; 01502 517444 Fax; 01502 500521 www.hannants.co.uk sales@hannants.co.uk

HISTOREX AGENTS

Wellington House, 157 Snargate Street, Dover, Kent, CTI7 9BZ, UK Tel: 01304 206720 www.historex-agents.co.uk sales@historex-agents.co.uk

HOBBYLINK JAPAN

Sano-shi, Kurohakama-cho 162-1, Tochigi 327-0813, Japan

HUSSAR PRODUCTIONS. CANADA

w.airconnection.on.ca

IAN ALLAN

www.ianallanpublishing.com Mail Order Dept 01455 254450

Kiev 02099, Ukraine, Borispolskaya 9 building 64. Tel/fax; (+38044) 369-54-12 export@icm.com.ua www.icm.com.ua

ITALERI

(The Hobby Company in UK)
Via Pradazzo, 6, I-400I2 Calderara Di Reno, Bologna, Italy, Tel; 05I 726037

JUST BASES

21 Graham Road, Paignton TQ3 IBB Tel; 01803 558520

4 High Street, Botley, Southampton, SO30 2EA Tel; 0I489 78II77 www.justkitsandmodels.co.uk

Model Design Construction, Victoria Place, Victoria Road, Ripley, Derbyshire DE5 3FW Fax: 01773 513344 orders@modeldesignconstruction.com www.modeldesignconstruction.com

MODELING ARTISAN MORI

http://www3.ocn.ne.ip/~m.a.mori/index eng.html

MIG PRODUCTIONS

(Creative Models in UK)
C/ Santiago Rusinol 7, Pral 2a,

08750 Molins de Rei, Barcelona, Spain www.mignroductions.com

MILICAST MODEL CO., 9 Rannoch St., Battlefield, Glasgow G44 4DF, Scotland Tel/Fax; 014I 633 1400 milicastmodels@hotmail.com

MISSION MODELS

(ETCHMATE, GRABHANDLER, MICRO CHISEL)

www.etchmate.com w.missionmodels.com Tel; 818 842 1885 Fax; 818 842 1886 info@missionmodels.com. sales@missionmodels.com, orders@missionmodels.com

THE ARMORY; M&MODELS 9329 S. Cicero Ave, Oak Lawn, IL 60453, USA http://home.earthlink.net/~mmodels/

MODEL WHOLESALE UK LTD

Tel: 01892 533036 www.modelwholesaleuk.com

Monroe Perdu Designs, 3168 Renee Court, Simi Valley, CA 93065, USA. www.monroeperdu.com

ORDNANCE MODELS

Via: www.steelmodels.com

PACIFIC COAST MODELS

Tel; 001 707 538 4850 info@pacmodels.com

PANZERWRECKS

PO Box 164. Heathfield, Sussex TN2I 8WA, UK www.panzerwrecks.com

PLUS MODEL

lels in UK)

Jizni 56, 370 IO C. Budejovice, Czech Republic. plusmodel@plusmodel.cz www.plusmodel.cz

POCKETBOND LTD

(Trumpeter & AFV Club in UK) PO Box 80, Welwyn, Hertfordshire, England, AL6 OND Tel; 01707 391509 Fax: 01707 327 466 info@pocketbond.co.uk

PSP MODELS LTD

(Mission Models in USA) Unit 19B, Applin's Farm, Farrington, Dorset DTII 8RA, UK Tel/Fax: 01747 811 817

QUICKBOOST

www.quickboost.net

REVELL GmbH & Co. KG

Orchard Mews, I8C High Street, Tring, Herts, HP23 5AH Tel: +44 (0) 1442 890285

UK distributor for Model Victoria and Royal Model P.O. Box II4, Barrow-in-Furness, Cumbria, LAI3 OWY.

Tel/Fax: 01229 430 749 sales@sbmodels.fsnet.co.uk www.sbmodels.net

PO Box 794, Cheltenham GL52 3ZW, UK RICHARDSBLC@aol.com

SBX MODEL SHOP

Norwich Road, Ipswich. IPI 5DN Tel; 01473 464311 www.sbxmodelshop.co.uk

SCHATTON BARRELS Industriestrasse 6, 94347 Ascha, Germany

Fax; 0996I 9I0 7826

SCHIFFER BOOKS

Schiffer Publishing, 4880 Lower Valley Rd, Atglen, PA, 19310 USA

SCHIFFER BOOKS in UK
Bushwood Books, No.6 Marksbury Avenue, Kew Gardens, Surrey TW9 4JF, UK Tel: 020 8392 8585, 020 8392 9876.

SCHUMO KITS

SDV MODEL

www.sdvmodel.cz

SIMPLE 2 TRADE

No 2 Hollywood Lane, Hollywood, Birmingham, B47 5PP Tel; 0121 474 3030

SMARTMODELLING

(Swash, Tasca, Gap, Yosci, Royal Model) No.7 Gordons Way, Oxted, Surrey RH8 OLN UK Tel: 01883 734746

smartmodelling@smart7.fsworld.co.uk

III5 Crowley Drive, Carrollton, TX 75006-I3I2 U.S.A

SWANN-MORTON

Owlerton Green, Sheffield, S6 2BJ Tel; +44 (0)114 234 4231 Fax: +44 (0)114 231 4966 General: info@swann-morton.com www.craftknives.com

TAMIYA JAPAN

Tamiya, Inc., 3-7 Ondawara Suruga-ku, Shizuoka 422-8610 JAPAN www.tamiva.com

TAMIYA UK; THE HOBBY COMPANY LIMITED Garforth Place, Knowlhill, Milton Keynes, MK5 8PG, UK Tel; 01908 605686 Fax; 01908 605666 enquiries@hobbyco.net www.hobbyco.net

TRUMPETER

www.trumpeter-china.com Pockethood in the LIK

VERLINDEN PRODUCTIONS

(Historex in UK)

811 Lone Star Drive, O'Fallon, Missouri 63366, USA

www.verlinden-productions.com

(Creative Models in UK)

Acrylicos Vallejo, SL Apartado 337 - 08800 Vilanova i la Geltrú, Barcelona, Spain Tel: (34) 93 893 60 12 Fax; (34) 93 893 II 54 www.acrylicosyalleio.com

VLS CORPORATION

(LSA in UK)

(TRAKZ, WINGZ, CUSTOM DIORAMICS, WARRIORS); Lincoln County Industrial Park, IOII Industrial Court, Moscow Mills, Missouri 63362, USA www.modelmecca.com

WHITE ENSIGN MODELS

8532 Lamar Drive, Huntington Beach, CA 92647, USA Tomsmodelworks@aol.com www.whiteensignmodels.com

WWII PRODUCTIONS, AUSTRALIA

12 Prince Street, Waratah, 2298, NSW, Australia Tel; +61 (0)2 4967 3205 Fax: +6I (0)2 4967 3207 ww2prod@optusnet.com.au

(The Hobby Company in UK)
Promishlennaia Str.,2, Lobnya, Moscow Region, 141730 Russia office@zvezda.org.ru www.zvezda.org.ru



FOR YOUR SAFETY

Don't forget, when using solvents such as glues, paints, thinners and cleaning agents, always ventilate your work area thoroughly and wear a face mask.

RESCUE ME!

Andy King rescues his partly built Trumpeter

1:35 scale E-25 from the Shelf of Doom.

When using power tools, side cutters or any tool that can suddenly break or create highspeed airborne particles, wear approved eye protectors with hard, clear lenses. Please always model in safety!

...and much more!

Due to many influencing factors, we cannot guarantee the appearance of the above projects, but we'll try our best!



MELBOURNE MODEL EXPO

The Editor brings news and models on display at Australia's biggest model show, the Melbourne Model Expo.

ISSUE No.124 August 2016, Published July 7th 2016

Editor: Brett Green Group Editor: Marcus Nicholls Publisher; Alan Harman Graphic Design: Alex Hall Advertising Manager; Sean Leslie Office Manager; Paula Gray Administration Manager: Hannah McLaurie Administration Assistant; Julie Lane MMI Website: ADH Web Team

Printed by;

Henry Stone Ltd, Oxfordshire

Distributed by;

Seymour Distribution 2 East Poultry Avenue, London, EC1A 9PT Tel; 020 7429 4000

Newstrade;

Select Publisher Services 3 East Avenue, Bournemouth, BH3 7BW Tel: 01202 586848 Email; tim@selectps.com

Model Military International is published on the first Thursday of each month by; ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX UK www.modelmilitary.com Tel; +44 (0)1525 222573 Fax; +44 (0)1525 222574

Editorial enquiries;

Email; editor@modelmilitary.com

Advertising enquiries; Tel; +44 (0)1525 222573 Email: sean@adhpublishing.com

Subscription enquiries; Tel; +44 (0)1525 222573 Fax; +44 (0)1525 222574 Email; enquiries@adhpublishing.com

Reproduction in part of any text, photograph, or illustration without written consent from the publisher is strictly prohibited. While due care is taken to ensure the contents of Model Military International is accurate, the publishers and printers can not accept responsibility for errors and omissions.

Advertisements are accepted for publication in Model Military International only on ADH Publishing's standard terms of acceptance of advertising, copies of which are available from the advertising department. Please write to the address above. All advertising, circulation and subscription enquiries should also be directed to the UK address above.

Subscription rates are;

1 year (12 issues); £44 UK £56 Europe £69 Worldwide (Airmail)

Binders;

£8.50 plus postage (UK £2.45, Euro £4.45, World £6.45) For all orders, please call; (UK) +44(0)1525 222573 or visit www.modelmilitary.com

Back Issues are available at the current cover price. See the latest back issues advert or visit www.modelmilitary.com

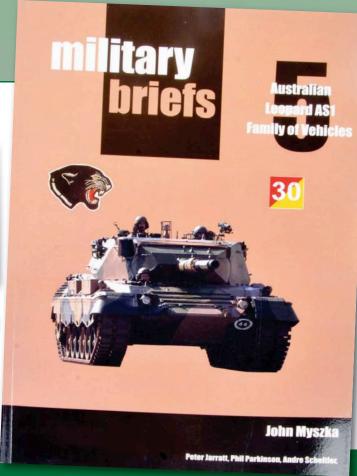
The paper used in this magazine is manufactured at the Leipa Georg Mill and is 100% recycled using de-inked pulp. The mill conforms fully with the requirements of both FSC and PEFC and carries the full accreditations



The paper used on this title is from sustainable forestry







Military Briefs No. 5
Australian Leopard AS1 Family of Vehicles

By John Myszka, Peter Jarratt, Phil Parkinson and Andre Scheitler. Mouse House Enterprises www.mheaust.com.au <u>Softbound, 192 pages, 450+ colour photographs</u>

he Australian government placed its order for the Leopard tank in 1974. A total of 101 vehicles were acquired, consisting of 90 MBTs, five Bridgelayers and six Armoured Recovery Vehicles.

Two more ARVs were purchased subsequently.

The first Leopards arrived in Australia from Germany in 1976, ending a selection and trial process against the US M60A1 that started in 1971 when the Army decided it needed a replacement for its Centurions, which had served since 1952 and been deployed during the Vietnam War.

The Leopard 1 was operated by the 1st Armoured Regiment and was officially withdrawn from service in July 2007, when it was replaced with the US M1A1 Abrams AIM. Some of the retired Leopard tanks were offered to military museums or RSL clubs. *

Mouse House Enterprise's most recent book covers the Australian Leopard AS1 Family of Vehicles.

It is presented over 192 pages between soft cardboard covers. More than 450 colour photos document the development and trial vehicles, operational tanks, support vehicles, plus detail images of all variants. The photos are large and well reproduced – the jewel in the crown of this weighty reference tome. A good number of line drawings, scrap views and other illustrations are included too.

The book is broken down into the following Chapters:

Australian Army Medium Tank Trials

This Chapter covers the Trial Directive, the Trials themselves, purchase and delivery.

Leopard AS1 MBT Description

This Chapter describes the hull, engine, turret, armament and the interior of the fighting compartment

Leopard AS1 Support Tanks

Covering the Leopard Dozer, mine clearing equipment (mine rollers and mine ploughs), the Armoured recovery Vehicle Medium

The First Exercise

In Service Modifications

Turret stowage baskets, hull tool boxes, instructor's cage, gunnery system, Tank Fire Control System trainer

Leopard Crew Climate Control System

Includes air conditioning, Barracuda Mobile Camouflage System, Umbrella TOPCAM and Air Circulation System

A series of short sections follow, including Leopard Tank Thermal Sight, Leopard Precision Gunnery Trainer, Additional Leopard Purchases, Experimental Leopards, Road Wheels, Move to Darwin, Australian Leopard Camouflage, and Vehicle Markings.

Separate sections are provided for Leopards on Exercise between 1980 and 2007.

The main body of the book is wrapped up with a summary of tank transporters, rail transport, Leopard crew and scale drawings in both 1:72 and 1:35 scales.

Ten useful Appendices follow:

- A. Leopard AS.1 Specifications
- B. Comparative Data Leopard and M60A1
- C. Leopard Registration Numbers
- D. Leopards on Exhibition
- E. Leopard AS1 FOV Disposal
- F. Snapshot of Vehicle Callsigns
- G. Other References
- H. Visual differences between the Leopard 1A3 and 1A4 turrets
- I. Commanding officers of 1st Armoured Regiment 1977-2007
- J. Models available of Leopard AS1 MBTs.

The high standard of research is matched by the presentation of the book. The paper is of high quality and glossy between its perfect bound soft covers. Layout is straightforward, most of the photos are of good size and well reproduced, and the text is easy to read.

With their Military Briefs 5, Mouse House Enterprises has delivered a comprehensive work on the Australian Leopard AS1 Family of Vehicles. The format is ideal as a one-stop reference source for modellers, but will also be of interest to the armchair historian.

Not surprisingly, Mouse House also lists its own growing range of resin updates and conversions for the various Leopard kits.

Highly Recommended.

Brett Green

Thanks to Mouse House Enterprises for the sample www.mheaust.com.au



D3553



Up-to-Date and in 1/48!

1/48 Military Miniature Series Japan Ground Self Defense Force Type 10 Tank (Item 32588)

Updated spec Type 10 recreated in compact 1/48 scale, with JGSDF cooperation

The 1/48 Military Miniature series has long been a favorite with modelers on account of its cadre of highly-realistic small scale recreations of classic vehicles and figures. Now, it receives its first model of a currently-serving tank – the Japan Ground Self Defense Force (JGSDF) Type 10. This compact masterpiece was designed with extensive access to the actual tank, and includes modifications seen in Type 10s from the C4 lot, which were delivered to units from the second half of 2014 onwards. It expertly renders the Type 10's compact and lightweight form, with breathtaking depictions of features such as the domestically-developed smoothbore 120mm gun and the distinctive modular armor, right down to detail like sensors and cameras. It all adds up to a highly refined and up-to-date model that will be just perfect for your collection.



Front mudguards capture new C4 lot designs.

